

Operator Manual

LP222cn



Printer Operator Guide

Introduction

This manual contains detailed instructions and notes on the operation and use of this machine. For your safety and benefit, read this manual carefully before using the machine. Keep this manual in a handy place for quick reference.

Power Source

120 V, 60 Hz, 11 A or more

Please be sure to connect the power cable to a power source as above.

Laser Safety:

This machine is considered class I laser device, safe for office/ EDP use. The machine contains 5 milliwatt, 770 - 795 nanometer wavelength, AlGaInp Laser Diode (4 provided). Safety precautions and interlock mechanisms have been designed to prevent any possible laser beam exposure to the operator.

Important

Contents of this manual are subject to change without prior notice. In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

Caution:

Use of controls or adjustments or performance of procedures other than those specified in this manual might result in hazardous radiation exposure.

Do not copy or print any item for which reproduction is prohibited by law.

Copying or printing the following items is generally prohibited by local law:

bank notes, revenue stamps, bonds, stock certificates, bank drafts, checks, passports, driver's licenses.

The preceding list is meant as a guide only and is not inclusive. We assume no responsibility for its completeness or accuracy. If you have any questions concerning the legality of copying or printing certain items, consult with your legal advisor.

Two kinds of size notation are employed in this manual. With this machine refer to the inch version.

For good copy quality, the supplier recommends that you use genuine toner from the supplier.

The supplier shall not be responsible for any damage or expense that might result from the use of parts other than genuine parts from the supplier with your office products.

Some illustrations in this manual might be slightly different from the machine.

Certain options might not be available in some countries. For details, please contact your local dealer.

Safety Information

When using your printer, the following safety precautions should always be followed.

In this manual, the following important symbols are used:

 **WARNING:**

Indicates a potentially hazardous situation which, if instructions are not followed, could result in death or serious injury.


 **CAUTION:**

Indicates a potentially hazardous situation which, if instructions are not followed, may result in minor or moderate injury or damage to property.

 **WARNING:**

- ***Confirm the wall outlet is near the machine and freely accessible, so that in the event of emergency, it can be unplugged easily.***
- ***Plug and unplug the power cable with dry hands, or an electric shock could occur.***
- ***Only connect the machine to the power source described in the manual.***
- ***Avoid multi-wiring.***
- ***Do not damage, break or make any modifications to the power cord. Do not place heavy objects on it, pull it hard or bend it more than necessary. These actions could cause an electric shock or fire.***
- ***Do not incinerate spilled toner or used toner. Toner dust is flammable and might ignite when exposed to an open flame.***
- ***Disposal should take place at an authorized dealer or an appropriate collection site.***
- ***If you dispose of the used toner containers yourself, dispose of them according to local regulations.***
- ***Dispose at an authorized dealer or approved collection site. If you dispose of the used toner containers yourself, do so according to local regulations.***
- ***Do not risk electric shock by handling the power cord or plug with wet hands.***
- ***Do not take apart or attempt any modifications to this machine. There is a risk of fire, electric shock, explosion or loss of sight. If the machine has laser systems, there is a risk of serious eye damage.***
- ***The supplied power cord is for use with this equipment only. Do not use with other appliances. Doing so may result in fire, electric shock, or injury.***
- ***Keep the machine away from flammable liquids, gases, and aerosols. A fire or an electric shock might occur.***

 **CAUTION:**

- *Place no objects on the right cover.*
- *Do not pull out the paper tray forcefully. If you do, the tray might fall and cause an injury.*
- *The inside of this printer becomes very hot. Do not touch parts labelled “” (indicating a hot surface). Touching these parts will result in burns.*
- *Do not handle the plug with wet hands. Doing so might cause an electrical shock.*
- *Keep the machine in an area that is within optimum environmental conditions. Operating the machine in an environment that is outside the recommended ranges of humidity and temperature can cause an electrical fire hazard. Keep the area around the socket free of dust. Accumulated dust can become an electrical fire hazard.*
- *Place the machine on a strong and level surface. Otherwise, it might fall and injure someone.*
- *If toner or used toner is inhaled, gargle with plenty of water and move into a fresh air environment. Consult a doctor if necessary.*
- *If your skin comes into contact with toner or used toner, wash the affected area thoroughly with soap and water.*
- *If toner or used toner gets into your eyes, flush immediately with large amounts of water. Consult a doctor if necessary.*
- *If toner or used toner is swallowed, dilute by drinking a large amount of water. Consult a doctor if necessary.*
- *Avoid getting toner on your clothes or skin when removing a paper jam or replacing toner. If your skin comes into contact with toner, wash the affected area thoroughly with soap and water.*
- *If toner gets on your clothing, wash with cold water. Hot water will set the toner into the fabric and may make removing the stain impossible.*
- *Keep toner (used or unused) and the toner bottle out of reach of children.*
- *Grip the plug, not the cord, when pulling the plug from the socket. Pulling the cord causes wear and tear that can result in fire or electric shock.*
- *Wait at least one hour after power off before replacing parts. Not allowing the printer to cool may result in burns.*
- *Lifting the paper feed unit carelessly or dropping it may cause injury.*

⚠ CAUTION:

- *When removing misfed paper, do not touch the fusing unit because it could be very hot.*
- *The printer weighs approximately 32 kg (70.5 lb.). When moving the printer, use the inset grips on both sides, and lift slowly. The printer will break or cause injury if dropped.*
- *Before installing options, the machine should be turned off and unplugged for at least half an hour. Components inside the machine become very hot, and can cause a burn if touched.*
- *Lifting the paper feed unit carelessly or dropping it may cause an injury.*
- *Do not touch the inside of the controller board compartment. It may cause a machine malfunction or a burn.*
- *When moving the machine, each person should hold the handles that are located on opposite sides, and then lift it slowly. Lifting it carelessly or dropping it may cause an injury.*
- *When you move the printer, remember to unplug the power cord from the wall outlet to avoid a fire or an electric shock.*
- *When moving the printer after use, do not take out any of the Toners, Photo Conductor Units, nor the Waste Toner Cartridge to prevent toner spill inside the machine.*
- *When lifting the machine, use the inset grips on both sides. Otherwise the printer could break or cause an injury if dropped.*
- *Before moving the machine, unplug the power cord from the wall outlet. If the cord is unplugged abruptly, it could become damaged. Damaged plugs or cords can cause an electrical or fire hazard.*

 Note

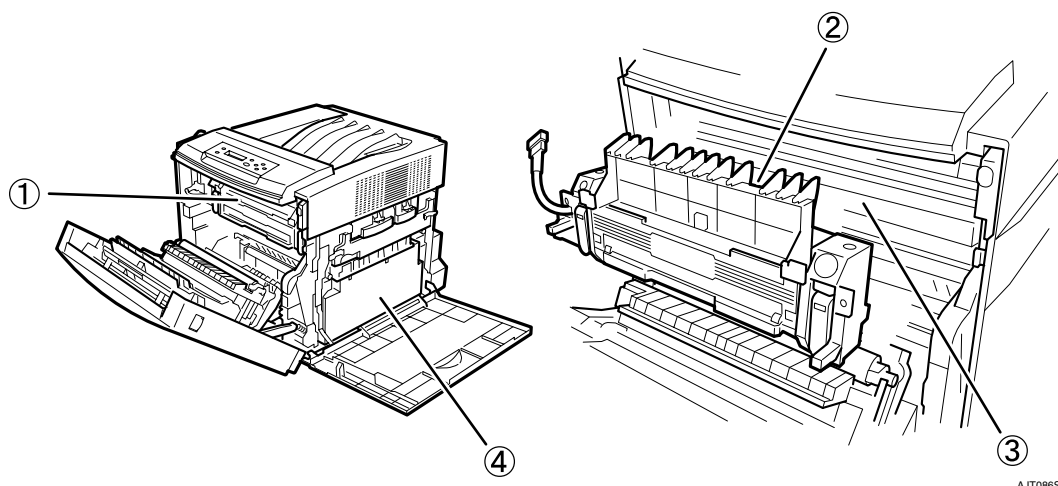
- ☐ Under certain temperature and humidity conditions, printing may cause vapour to issue from paper. The standard tray (behind the control panel) may emit steam during printing.
- ☐ Our products are engineered to meet the highest standards of quality and functionality. When purchasing expendable supplies, we recommend using only those specified by an authorized dealer.

 Important

- ☐ Rating voltage of the connector for options: Max. DC 24 V.
- ☐ Voltage must not fluctuate more than 10%.

Positions of ⚠ WARNING and ⚠ CAUTION labels

This machine has labels for ⚠ WARNING and ⚠ CAUTION at the positions shown below. For safety, please follow the instructions and handle the machine as indicated.



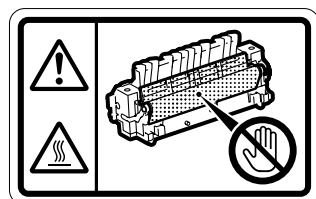
① High temperature parts. Turn off the main power and be careful when replacing fusing unit / removing misfed paper.



② The inside of this printer becomes very hot. Do not touch parts labelled “⚠” (indicating a hot surface). Touching these parts will result in burns.



③ The inside of this printer becomes very hot. Do not touch parts labelled “⚠” (indicating a hot surface). Touching these parts will result in burns.



④ Do not incinerate toner or toner containers. Toner dust may cause flashback when exposed to an open flame.

| | |
|--|---|
| <p>WARNING ATTENTION WARNING AVVISO AVISO ADVERTENCIA 警告</p> | <ul style="list-style-type: none"> ● Do not incinerate toner or toner containers. Toner dust may cause flashback when exposed to an open flame. ● Ne pas incinérer les cartouches ni les boîtes de cartouches de toner. Exposé à une flamme nue, la cendre de toner peut provoquer un retour de flamme. ● Verbrennen Sie keinen Toner oder Tonerkartusche. Tonerstaub kann beim Kontakt mit offenem Feuer explodieren. ● Non gettare il toner o i contenitori del toner sul fuoco. La polvere del toner si può incendiare dalla fiamma. ● No incinerar el tóner ni los contenedores de tóner. El polvo de tóner puede inflamarse al ser expuesto al fuego. ● Não exponha o Tóner ou a sua embalagem ao fogo. O pó de Tóner poderá explodir quando exposto a chama viva. ● トナー又はトナーの入った容器を直接焼却炉等の火中に投入しないでください。火傷をするおそれがあります。 |
|--|---|

In accordance with IEC 60417, this machine uses the following symbols for the main power switch:

I means POWER ON.

○ means POWER OFF.

Note to users in the United States of America

Note:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio /TV technician for help.

Caution:

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Caution (in case of 100BaseTX environment):

Properly shielded cables must be used for connections to host computer (and/or peripheral) in order to meet FCC emission limits.

Network interface cable with ferrite core must be used for RF interference suppression.

Declaration of Conformity

Product Name: Laser Printer

Model Number: Aficio CL3500N/C7521n/CLP22/LP222cn

Responsible party: Ricoh Corporation

Address: 5 Dedrick Place, West Caldwell, NJ 07006

Telephone number: 973-882-2000

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation.

Properly shielded cables must be used for connections to host computer (and/or peripheral) in order to meet FCC emission limits.

Network interface cable with ferrite core must be used for RF interference suppression.

Pour empêcher que cet appareil cause du brouillage au service faisant l'objet d'une licence, il doit être utilisé à l'intérieur et devrait être placé loin des fenêtres afin de fournir un écran de blindage maximal. Si le matériel (ou son antenne d'émission) est installé à l'extérieur, il doit faire l'objet d'une licence.

Note to users in Canada

Note:

This Class B digital apparatus complies with Canadian ICES- 003.

IEEE 802.11b Interface Unit Type H (R-WL11B):

This device complies with RSS 210 of Industry Canada.

To prevent radio interference to the licensed service, this device must be operated indoors only and should be kept away from windows to provide maximum shielding.

Remarque concernant les utilisateurs au Canada

Avertissement:

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

IEEE 802.11b Interface Unit Type H (R-WL11B):

Pour empêcher que cet appareil cause du brouillage au service faisant l'objet d'une licence, il doit être utilisé à l'intérieur et devrait être placé loin des fenêtres afin de fournir un écran de blindage maximal. Si le matériel (ou son antenne d'émission) est installé à l'extérieur, il doit faire l'objet d'une licence.

Caution: Lithium Batteries (RTC Back-up):

The danger of explosion exists if a battery of this type is incorrectly replaced. Replace only with the same or an equivalent type recommended by the manufacturer. Discard used batteries in accordance with the manufacturer's instructions.

Note to Administrator

This manual is intended to provide administrators with additional information about the security functions of this printer. Read this manual as well as *Setup Guide* and *Software Guide*.

This manual and its contents should be kept by, and restricted to, administrators.

Password

When you log into this printer, you will be prompted to enter the user name and password for your account. We strongly recommend you change the factory default user name and create a password immediately to prevent information leakage and unauthorized operations by others.

You will be prompted to enter your login password when performing the following operations:

- Logging in to Administrator mode in Web Image Monitor
- Starting User Management Tool of SmartDeviceMonitor for Admin
- Connecting to the printer via telnet
- Connecting to the printer via ftp

To use the default account, enter “admin” as the user name, and leave the password blank.

You can set the password in Web Image Monitor or telnet.

The password set here can be used to log in for any operation.

Reference

For details about setting a password, see “Monitoring and Configuring the Printer”, *Software Guide*, or Web Image Monitor Help.

Addendum for [Menu] function

Administrator menu

The control panel allows you to perform various basic configurations and adjustments that are required to use the printer. However, in order to protect the printer from threats such as unauthorized access, data manipulation, and tampering, “administrator menus”, which are not normally displayed, are provided for administrators.

This printer comes with the following administrator menus:

❖ **Administrator menus under [Maintenance]:**

- Menu Protect
- List Print Lock
- File Locking
- Unlock Files

 **Note**

- ❑ The "File Locking" and "Unlock Files" menus are displayed when the optional hard disk is installed.

❖ **Administrator menus under [Host Interface]:**

- USB Setting
- Bluetooth

 **Note**

- ❑ [Bluetooth] is displayed when the optional Bluetooth interface unit is installed.

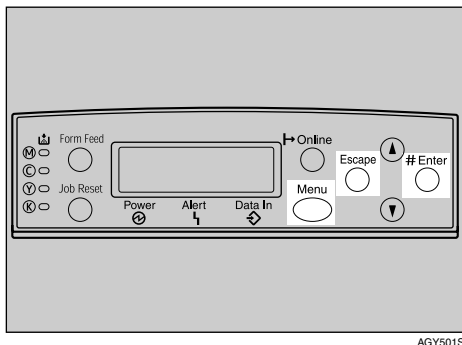
Displaying administrator menus

You can display the administrator menus by using specific key combinations on the control panel of the printer.

This section describes how to display the administrator menus.

1 Check the printer is online.

2 Press the [# Enter] key, press the [Escape] key, and then press the [Menu] key.



AGY501S

The menu screen appears.

```
Menu:
Paper Input
```

3 Press the [▲] or [▼] key to display [Maintenance], and then press the [# Enter] key.

```
Menu:
Maintenance
```

- 4** Press the [▲] or [▼] key to check the administrator menus including [Menu Protect] and [List Print Lock] are displayed.

You can now display the administrator menus and make any necessary changes to the settings.

- 5** Press the [Online] key after completing all the required settings.

The initial screen appears, preventing you from displaying the administrator menus. To display the administrator menus again, repeat the procedures from the start.

Maintenance menu parameters (administrator menu)

❖ Menu Protect

You can protect menu settings from accidental changes.

- Level 1
You can preserve settings for the [Maintenance], [System], [Host Interface], [PCL Menu], [PS Menu], [PDF Menu], and [Language] menus.
- Level 2
You can preserve settings for the [Paper Input], [Maintenance], [System], [Host Interface], [PCL Menu], [PS Menu], [PDF Menu], and [Language] menus.
- Off
Operation of menu items is unrestricted.

Note

☐ Default: *Off*

❖ List Print Lock

You can restrict the list and test printing

- On
Specifying [On] normally hides the [List/Test Print] menu, preventing users from performing any test print operations using the control panel.
- Off
No menu item operations are restricted.

Note

☐ Default: *Off*

❖ File Locking

If the user tries to access a file and enters the wrong password 10 times, the file is automatically locked.

- On
- Off

Note

☐ Default: *Off*

❖ **Unlock Files**

You can unlock a file that was locked due to a user entering a wrong password 10 times.

Host Interface menu parameters (administrator menu)

❖ **USB Setting**

You can specify the USB communication speed.

- Full Speed
You can set the communication speed of USB to USB1.1.
- Auto

Note

☐ Default: *Auto*

❖ **Bluetooth**

You can set the operating mode of Bluetooth.

- Public
- Private

Note

☐ Default: *Public*

☐ This menu item is displayed if the optional Bluetooth interface unit is installed.

☐ If the settings are changed to “Private” after registering computers that use this printer with the operating mode set to “PublicPrivate”, only registered computers can use this printer via the Bluetooth interface unit.

☐ You can change the operating mode in Web Image Monitor or telnet.

Reference

For details about Web Image Monitor, see “Using Web Image Monitor”, *Software Guide*. For details about settings, see Web Image Monitor Help.

For details about how to change the operating mode in telnet, see “Remote Maintenance by telnet”, *Software Guide*.



Setup Guide

Read This First

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Trademarks

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Bluetooth® is a registered trademark of the Bluetooth SIG, Inc. worldwide.

Other product names used herein are for identification purposes only and might be trademarks of their respective companies. We disclaim any and all rights to those marks.

The proper names of the Windows operating systems are as follows:

- Microsoft® Windows® 95 operating system
- Microsoft® Windows® 98 operating system
- Microsoft® Windows® Millennium Edition (Windows Me)
- The product names of Windows® 2000 are as follows:
 - Microsoft® Windows® 2000 Advanced Server
 - Microsoft® Windows® 2000 Server
 - Microsoft® Windows® 2000 Professional
- The product names of Windows® XP are as follows:
 - Microsoft® Windows® XP Professional
 - Microsoft® Windows® XP Home Edition
- The product names of Windows Server™ 2003 are as follows:
 - Microsoft® Windows Server™ 2003 Standard Edition
 - Microsoft® Windows Server™ 2003 Enterprise Edition
 - Microsoft® Windows Server™ 2003 Web Edition
- The product names of Windows NT® 4.0 are as follows:
 - Microsoft® Windows NT® Server 4.0
 - Microsoft® Windows NT® Workstation 4.0

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When using your printer, the following safety precautions should always be followed.

In this manual, the following important symbols are used:

 **WARNING**

Indicates a potentially hazardous situation which, if instructions are not followed, could result in death or serious injury.


 **CAUTION**

Indicates a potentially hazardous situation which, if instructions are not followed, may result in minor or moderate injury or damage to property.

 **WARNING**

- *Confirm the wall outlet is near the machine and freely accessible, so that in the event of emergency, it can be unplugged easily.*
- *Plug and unplug the power cable with dry hands, or an electric shock could occur.*
- *Only connect the machine to the power source described in the manual.*
- *Avoid multi-wiring.*
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- *The supplied power cord is for use with this equipment only. Do not use with other appliances. Doing so may result in fire, electric shock, or injury.*
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CAUTION

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- *When you move the printer, remember to unplug the power cord from the wall outlet to avoid a fire or an electric shock.*
- *When moving the printer after use, do not take out any of the Toners, Photo Conductor Units, nor the Waste Toner Cartridge to prevent toner spill inside the machine.*
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- *Before moving the machine, unplug the power cord from the wall outlet. If the cord is unplugged abruptly, it could become damaged. Damaged plugs or cords can cause an electrical or fire hazard.*

Note

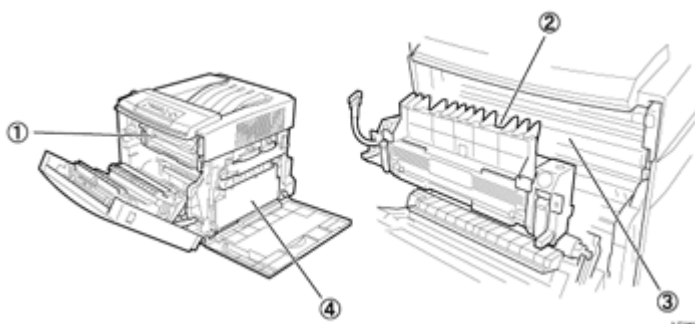
- ☐ Under certain temperature and humidity conditions, printing may cause vapour to issue from paper. The standard tray (behind the control panel) may emit steam during printing.
- ☐ Our products are engineered to meet the highest standards of quality and functionality. When purchasing expendable supplies, we recommend using only those specified by an authorized dealer.

Important

- ☐ Rating voltage of the connector for options: Max. DC 24 V.
- ☐ Voltage must not fluctuate more than 10%.

Positions of ⚠ WARNING and ⚠ CAUTION labels

This machine has labels for ⚠ WARNING and ⚠ CAUTION at the positions shown below. For safety, please follow the instructions and handle the machine as indicated.



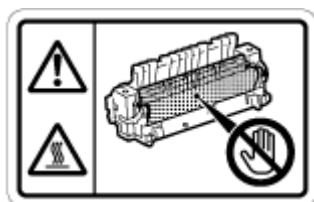
① High temperature parts. Turn off the main power and be careful when replacing fusing unit / removing misfed paper.



② The inside of this printer becomes very hot. Do not touch parts labelled “⚠” (indicating a hot surface). Touching these parts will result in burns.



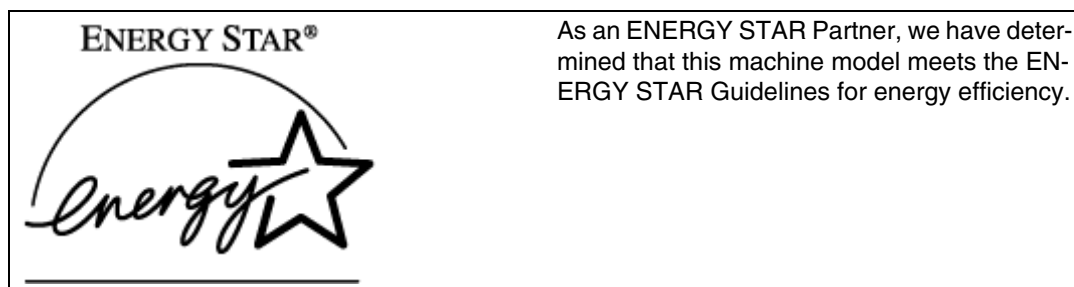
③ The inside of this printer becomes very hot. Do not touch parts labelled “⚠” (indicating a hot surface). Touching these parts will result in burns.



④ Do not incinerate toner or toner containers. Toner dust may cause flashback when exposed to an open flame.



ENERGY STAR Program



The ENERGY STAR Guidelines intend to establish an international energy-saving system for developing and introducing energy-efficient office equipment to deal with environmental issues, such as global warming.

When a product meets the ENERGY STAR Guidelines for energy efficiency, the Partner shall place the ENERGY STAR logo onto the machine model.

This product was designed to reduce the environmental impact associated with office equipment by means of energy-saving features, such as Low-power mode.

❖ Low-power Mode (Energy Saver mode)

This printer automatically lowers its power consumption 1 minutes after the last operation has been completed. To exit Low-power (Energy Saver) mode, press any key on the control panel. For more information about how to configure Energy Saver mode, see "Making Printer Settings with Control Panel", Software Guide as a HTML file on the CD-ROM.

❖ Specifications

| | | |
|-------------------|-------------------|-------------------|
| Energy Saver mode | Power Consumption | 9 W or less |
| | Default Time | 1 minutes |
| | Recovery Time | 3 seconds or less |

How to Read This Manual

The following set of symbols is used in this manual.

WARNING

This symbol indicates a potentially hazardous situation that might result in death or serious injury when you misuse the machine without following the instructions under this symbol. Be sure to read the instructions, all of which are described in the Safety Information section.

CAUTION

This symbol indicates a potentially hazardous situation that might result in minor or moderate injury or property damage that does not involve personal injury when you misuse the machine without following the instructions under this symbol. Be sure to read the instructions, all of which are described in the Safety Information section.

* The statements above are notes for your safety.

Important

If this instruction is not followed, paper might be misfed, originals might be damaged, or data might be lost. Be sure to read this.

Preparation

This symbol indicates information or preparations required prior to operating.

Note

This symbol indicates precautions for operation, or actions to take after abnormal operation.

Limitation

This symbol indicates numerical limits, functions that cannot be used together, or conditions in which a particular function cannot be used.

Reference

This symbol indicates a reference.

[]

Keys that appear on the machine's display.

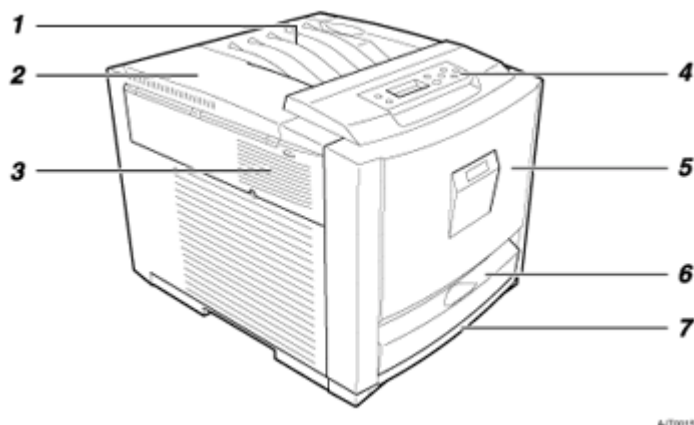
Keys and buttons that appear on the computer's display.

[]

Keys built into the machine's control panel.

Keys on the computer's keyboard.

Exterior: Front View



1. Standard Tray

Output is stacked here print side down.

2. Upper Left Cover

Open this to replace toner cartridges.

3. Ventilator

The ventilator helps keep internal components from overheating. Overheating results in malfunction. Make sure the ventilator is not blocked by objects or in any way obstructed.

4. Control Panel

Contains keys for printer control and a panel display that displays the printer's status.

5. Front Cover

Open this to replace the fusing unit or transfer roller, install the duplex unit, or remove misfed paper.

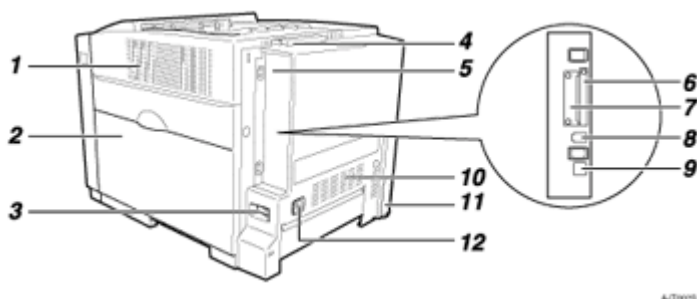
6. Bypass Tray

Use this to print onto thick paper, OHP transparencies, custom size paper, and envelopes, as well as plain paper. Special printer driver settings must be made in order to print onto custom size paper.

7. Tray 1

Up to 530 sheets of plain paper can be loaded here.

Exterior: Rear View



1. Ventilator

The ventilator helps keep internal components from overheating. Overheating results in malfunction. Make sure the ventilator is not blocked by objects or in any way obstructed.

2. Right Cover

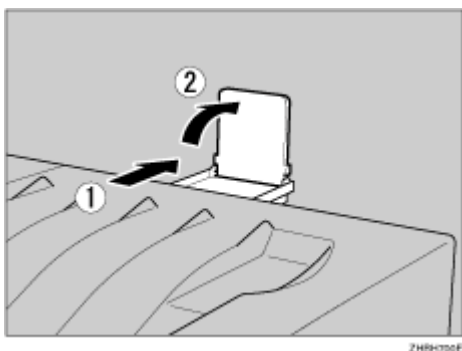
Open this to replace photo conductor units, the transfer belt, or the waste toner bottle.

3. Power Switch

Use this to turn the power on and off.

4. Standard Tray Extension

Pull this out when printing on paper that is longer than A4 or $8\frac{1}{2} \times 11$ ".



5. Controller Board

Slide this out to install options such as the memory unit, user account enhance unit, or printer hard disk. Plug cables such as the USB cable and Ethernet cable into their connectors here.

6. Expansion Card Slots

Install expansion cards in these slots. There are two slots.

To install an expansion card, use the under slot.

7. Optional Interface Board Slots

Insert an optional 1394 interface board, 802.11b interface unit, wireless interface board, or 1284 interface board in this slot. Up to one interface board can be inserted at a time.

8. USB Port

Use a USB cable to connect the printer to a host computer.

9. Ethernet Port

Use a network interface cable to connect the printer to a network.

10. Ventilator

The ventilator helps keep internal components from overheating. Overheating results in malfunction. Make sure the ventilator is not blocked by objects or in any way obstructed.

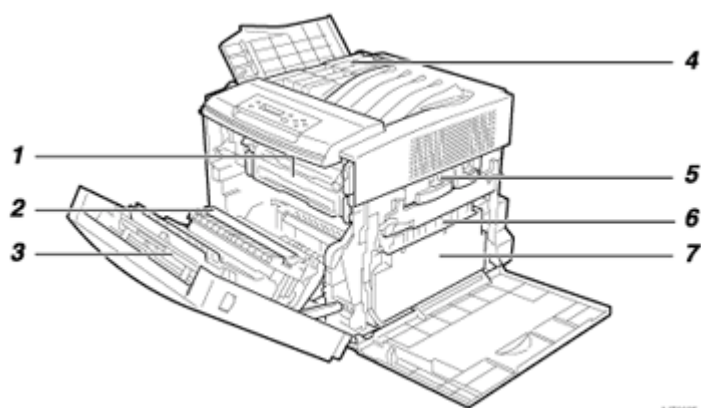
11. Optional Paper Feed Unit Connector

Use this to connect the printer to the paper feed unit.

12. Power Port

Connect the power cable to this socket and the other end of the cable directly to the wall outlet (do not use an extension).

Inside



1. Fusing Unit

Fuses the image onto paper.

When the “Replace Fusing Unit” message appears on the display, replace this unit.

2. Transfer Roller

When the “Replace Fusing Unit” message appears on the display, replace this roller.

3. Duplex Unit (optional for Basic Model Printer)

Use to print on both sides of paper.

4. Toner Cartridges

When the “Add Toner (color)” message appears on the display, replace the toner cartridge of the indicated color.

5. Photo Conductor Unit Color/Black

When the “Replace Color PCU” or “Replace Black PCU” message appears on the display, replace the indicated Photo Conductor Unit.

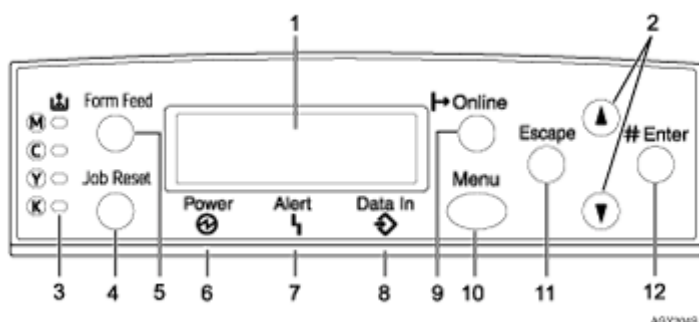
6. Transfer Belt

When the “Replace Transfer Belt” message appears on the display, replace this unit.

7. Waste Toner Bottle

Collects waste toner. When the “Replace Used Toner Bottle” message appears on the display, replace this bottle.

Control Panel



1. Display

Displays current printer status and error messages.

For details about error messages, see Maintenance Guide.

2. [▲] [▼] keys

Use these keys to increase or decrease values on the display when making settings.

Keep the key pressed to quicken scrolling, and increase or decrease values on the display in units of 10.

3. Toner End LED

The color of the lit LED indicates toner status for each color.

A yellow light indicates the toner amount is approaching exhaustion. A red light indicates the toner cartridge needs to be replaced.

4. [Job Reset] key

When the printer is online, press this key to cancel an ongoing print job.

5. [Form Feed] key

When the printer is offline, press this to print all data left in the printer's input buffer.

You can use this to force the printer to print data received in the online status when the paper size or type does not match the actually set size or type.

6. Power indicator

This indicator remains lit while the power is on. It is unlit when the power is off or while the printer is in Energy Saver mode.

7. Alert indicator

Lights up whenever a printer error occurs. A red light indicates an error has occurred that makes printing impossible; the yellow light indicates a potential error during printing.

If the red light is on, follow the instructions that appear on the display.

8. Data In indicator

Blinks when the printer is receiving data from a computer. The Data In indicator is lit if there is data to be printed.

9. [Online] key

Indicates whether the printer is online or offline. Press this to switch between online and offline.

When the lamp is lit, the printer is online, enabling data reception from the host computer.

When the lamp is unlit, the printer is offline, disabling data reception from the host computer.

Press to return to the ready condition.

10. [Menu] key

Press this key to make and check the current printer settings.

For details, See “Making Printer Settings Using the Control Panel”, Software Guide.

11. [Escape] key

Press this key to return to the previous condition on the display.

12. [# Enter] key

Press this key to execute menu items selected on the display.

Where to Put the Printer

The printer's location should be carefully chosen because environmental conditions greatly affect its performance.

WARNING

- *Confirm the wall outlet is near the machine and freely accessible, so that in the event of emergency, it can be unplugged easily.*
- *Only connect the machine to the power source described in the manual.*
- *Avoid multi-wiring.*
- *Do not damage, break or make any modifications to the power cord. Do not place heavy objects on it, pull it hard or bend it more than necessary. These actions could cause an electric shock or fire.*

WARNING

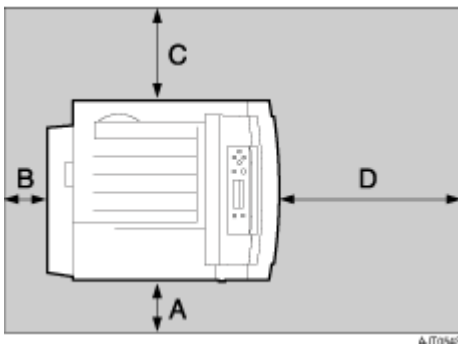
- *The supplied power cord is for use with this equipment only. Do not use with other appliances. Doing so may result in fire, electric shock, or injury.*

CAUTION

- *Do not handle the plug with wet hands. Doing so might cause an electrical shock.*
- *Keep the machine in an area that is within optimum environmental conditions. Operating the machine in an environment that is outside the recommended ranges of humidity and temperature can cause an electrical fire hazard. Keep the area around the socket free of dust. Accumulated dust can become an electrical fire hazard.*
- *Place the machine on a strong and level surface. Otherwise, it might fall and injure someone.*
- *If you use the machine in a confined space, ensure there is continuous air circulation.*

❖ Space Required for Installation

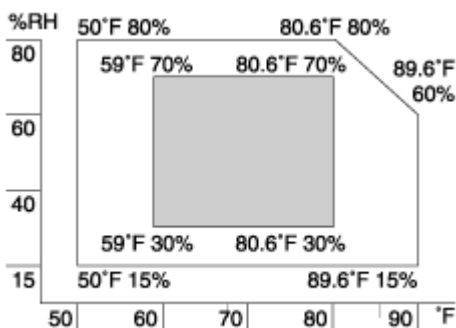
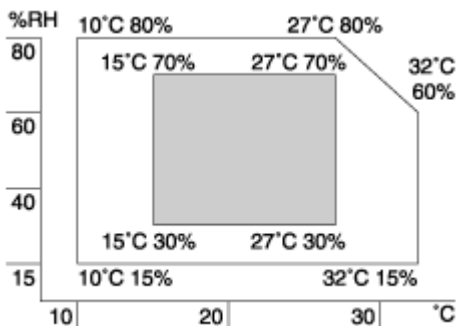
Leave enough space around the printer. This space is necessary to operate the printer. The recommended (or minimum) space requirements are as follows:



- A: 13 cm (5.2 inches) or more
- B: 11 cm (4.4 inches) or more
- C: 35 cm (14.0 inches) or more
- D: 61 cm (24.4 inches) or more

❖ Optimum Environmental Conditions

Permissible and recommended temperature and humidity ranges are as follows:



- White area: Permissible Range
- Gray area: Recommended Range



- ☐ The machine must be level within 5 mm, 0.2" from both front to rear and left to right.
- ☐ To avoid possible build-up of ozone, locate this machine in a large well ventilated room that has an air turnover of more than 30 m³/hr/person.
- ☐ When you use this machine for a long time in a confined space without good ventilation, you may detect an odd smell. To keep the workplace comfortable, we recommend you keep it well ventilated.

❖ Environments to Avoid



- ☐ Areas exposed to direct sunlight or strong light
- ☐ Dusty areas
- ☐ Areas with corrosive gases
- ☐ Areas that are excessively cold, hot, or humid
- ☐ Locations near air conditioners or humidifiers
- ☐ Locations near other electronic equipment
- ☐ Locations subject to frequent strong vibration

❖ Power Source

Connect the power cable to a power source of the following specification:

- 120 V, 60 Hz, 11 A or more

Checking the Contents of the Box

Follow the procedure below to verify the items that come with the printer.

★ Important

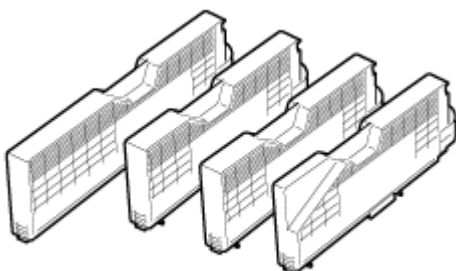
❑ Ensure that the box contains all items listed below. If there are any missing or defective items, contact your sales representative.

❖ **Manuals and CD-ROMs**

- ❑ Quick Installation Guide
- ❑ CD-ROM “Printer Drivers and Utilities”
- ❑ CD-ROM “Display-Version Manuals (HTML)”
- ❑ CD-ROM “Print-Version Manuals (PDF)”
- ❑ CD-ROM “Document Management Utility”

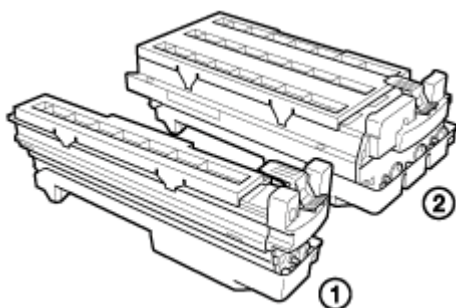
❖ **Parts**

- ❑ Power Cable
- ❑ Toner Cartridges: Black (K), Magenta (M), Cyan (C), Yellow (Y)



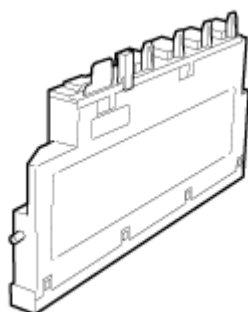
AJIT0555

❑ Photo Conductor Unit: Black (①), Color (②)



AJIT0555

□Waste Toner Bottle



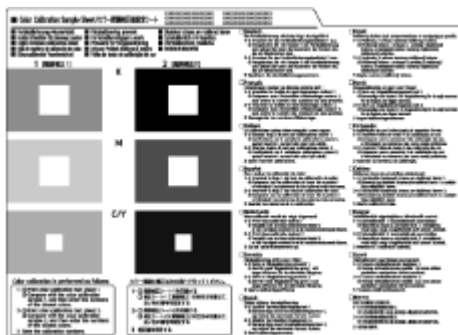
AJT0675

□Ferrite Core × 2

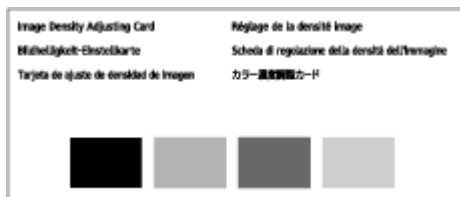


AET5105

□Color Calibration Sample Sheet



□Image density adjusting card



AJT0685

□User registration card

□Additional Documentation

↓ Note

- This package does not include an interface cable. Please purchase one to use with your host computer. See “Appendix”, Maintenance Guide.

Unpacking

To protect it from shock and vibration during transit, this printer comes packaged in cushioning foam and secured with tape. Remove these protective materials after bringing the machine to where it will be installed.

CAUTION

- *When lifting the machine, use the inset grips on both sides. The printer could break or cause an injury if dropped.*

CAUTION

- *Place no objects on the right cover.*

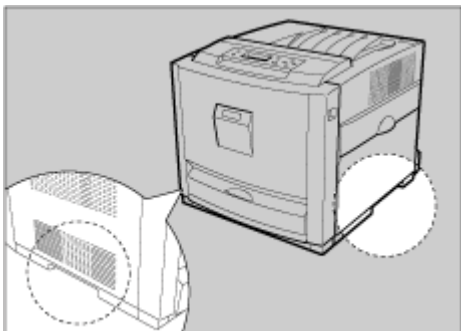
Important

- ☐ Be sure to remove all four strips of tape from the photo conductor unit to avoid malfunction.
- ☐ Removed tape is dirty. Be careful not to let it touch your hands or clothes.

1 Remove the plastic bag.

2 Position the printer where it is to be used. Lifting the printer requires at least two people.

Lift using the inset grips on both sides of the printer.



AJT0435

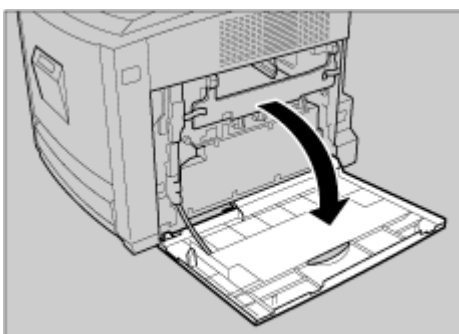
Important

- ☐ Leave the tape holding the paper feed tray and cover in place while moving the printer.
- ☐ Lower the machine slowly and carefully to prevent trapping your hands.

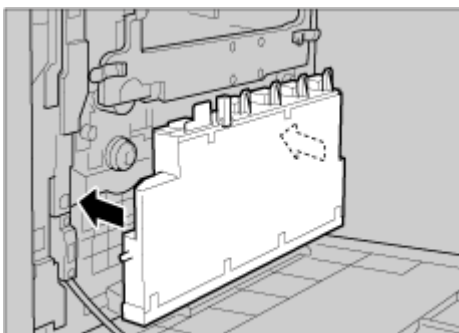
Installing the Waste Toner Bottle and Photo Conductor Unit

The following procedure describes installing the waste toner bottle and photo conductor unit.

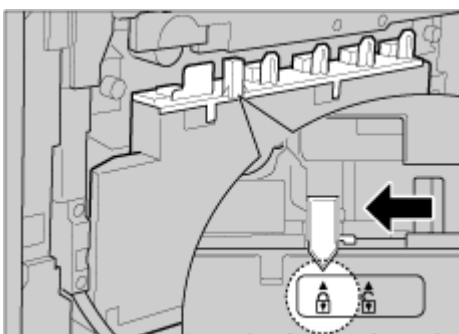
- 1** Open the printer's right cover.



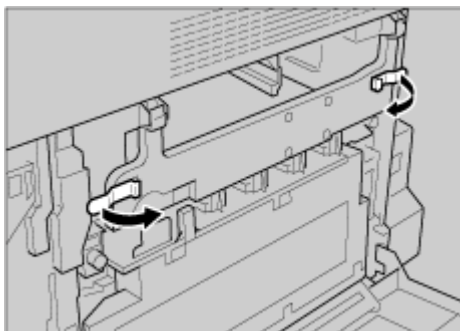
- 2** Place the waste toner bottle in the position shown in the illustration.



- 3** Lock the waste toner bottle by sliding the green arrow into the position shown.

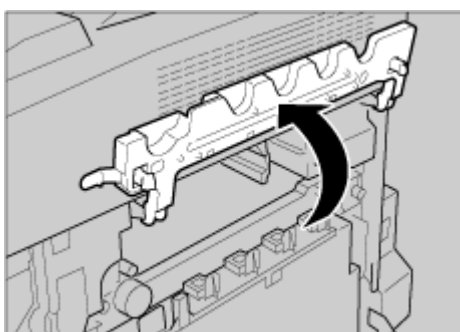


- 4** Pull out the green levers on the left and right that are securing the inner cover, and then unlock.



ZHSH001E

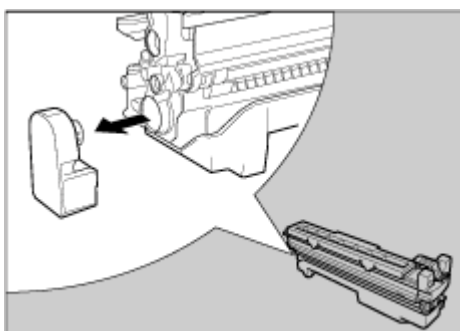
- 5** Lift the inner cover until it stays up.



ZHSH011E

- 6** Take out the black photo conductor unit.

- 7** Remove the cap attached to the photo conductor unit.

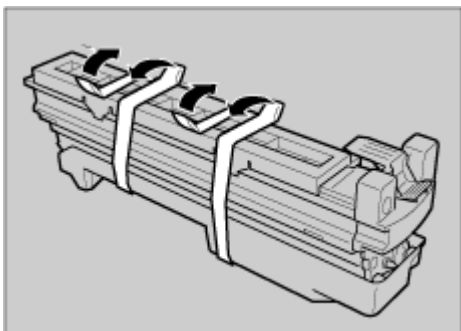


ZHSH001E

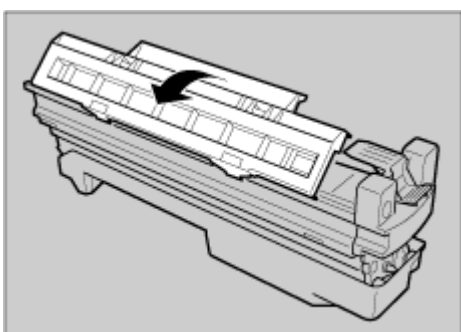
Note

- ☐ The cap is no longer needed and should be disposed of.

- 8** Remove the tape from around Photo Conductor Unit by peeling it downward, and then remove unit's top cover.



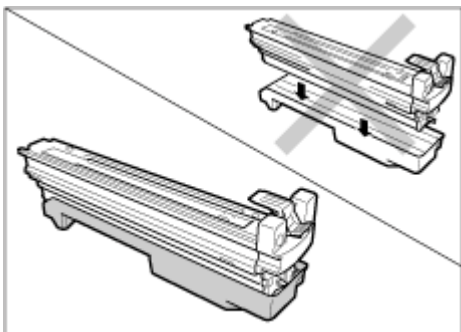
ZHSH081E



ZHSH0808E

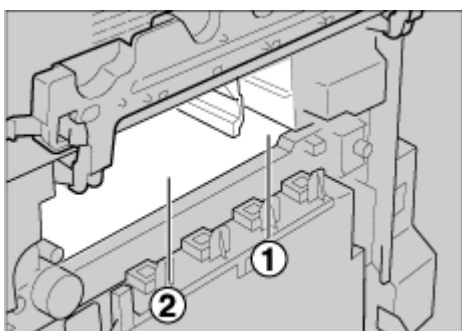
★ Important

- ☐ Do not remove the unit's bottom cover yet.
- ☐ Install the new Photo Conductor Unit as soon as you take it out of the bag.



ZHSH0802E

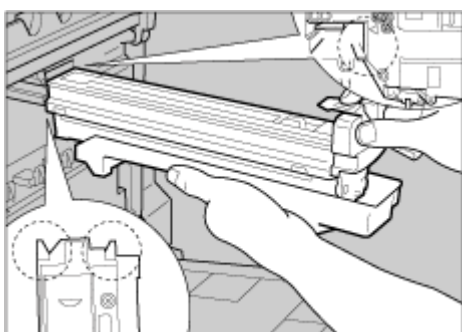
9 Check the locations for each Photo Conductor Unit.



① Photo Conductor Unit (Black)

② Photo Conductor Unit (Color)

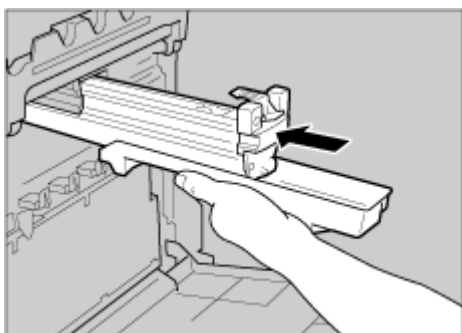
10 Align the green arrow at the tip of the photo conductor unit with the rail inside the printer.



★ Important

- ☐ Make sure the green arrow fits securely to the rail before proceeding to the next step.
- ☐ If you do not securely attach the green arrow of the photo conductor unit to the rail, you may damage the photo conductor unit.

- 11** Push the front of the photo conductor unit carefully in, sliding the unit from its cover, until it clicks into place.

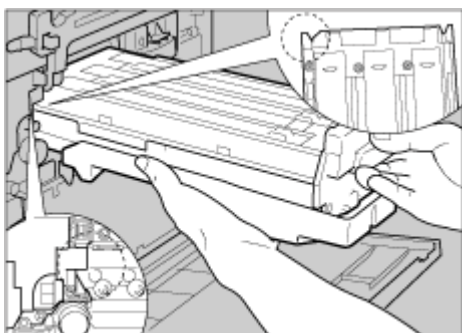


ZHSH080E

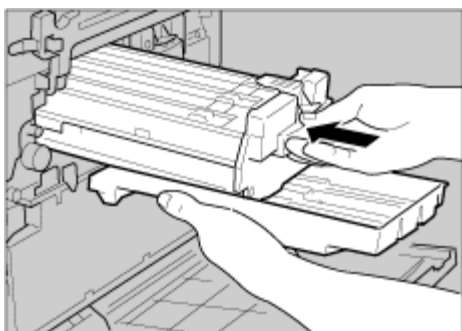
★ Important

- ☐ If the photo conductor unit is not correctly installed, print quality will be lost. For example, certain colors may not print.

- 12** Repeat steps [6](#) to [11](#) to install the color photo conductor unit.

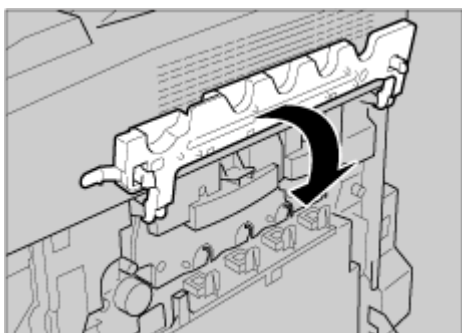


ZHSH080E

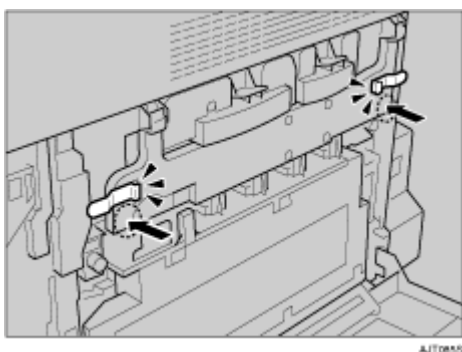


ZHSH400E

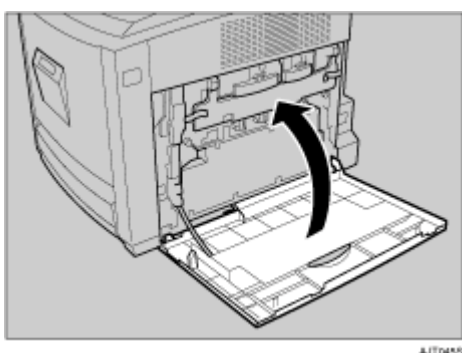
- 13** Lower the inner cover carefully.



- 14** Push the left and right edge of the inner cover to secure it.



- 15** Close the printer's right cover carefully.



Installing the Toner Cartridge

The following procedure describes how to install the toner cartridge.

WARNING

- ***Do not incinerate spilled toner or used toner. Toner dust is flammable and might ignite when exposed to an open flame.***
- ***Disposal should take place at an authorized dealer or an appropriate collection site.***
- ***If you dispose of the used toner cartridges yourself, dispose of them according to local regulations.***
- ***Do not store toner, used toner, or toner containers in a place with an open flame. The toner might ignite and cause burns or a fire.***

CAUTION

- *Keep toner (used or unused) and the toner cartridge out of reach of children.*
- *If toner or used toner is inhaled, gargle with plenty of water and move into a fresh air environment. Consult a doctor if necessary.*
- *If your skin comes into contact with toner or used toner, wash the affected area thoroughly with soap and water.*
- *If toner or used toner gets into your eyes, flush immediately with large amounts of water. Consult a doctor if necessary.*

CAUTION

- *If toner or used toner is swallowed, dilute by drinking a large amount of water. Consult a doctor if necessary*
- *Avoid getting toner on your clothes or skin when removing a paper jam or replacing toner. If your skin comes into contact with toner, wash the affected area thoroughly with soap and water.*
- *If toner gets on your clothing, wash with cold water. Hot water will set the toner into the fabric and may make removing the stain impossible.*

Important

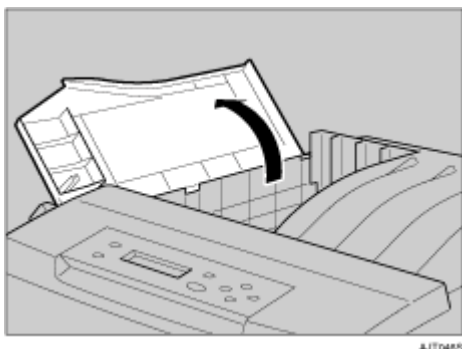
- ☐ When you first use this printer, use the four toner cartridges packaged with the printer.

Note

- ☐ The toner cartridges that comes with the printer will allow you to print up to about 2,500 pages. These numbers were obtained from printing A4 ☐ 5% charts, but the actual number of pages will vary depending on the paper type, size, contents, and settings.
- ☐ Toner Cartridges (consumable) are not covered by warranty. However, if there is problem, contact the store where they were purchased.

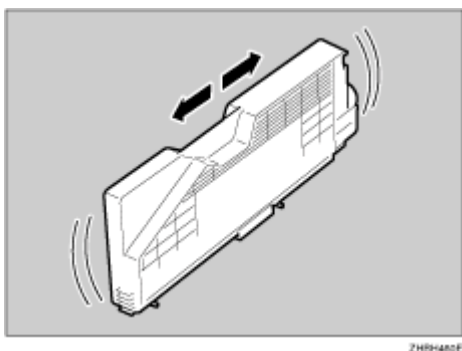
- ☐ Toner cartridge mouths may be dirtied during quality inspection.

1 Open the printer's upper left cover.



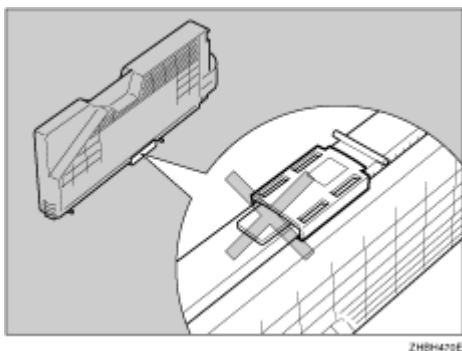
2 Take out the toner cartridge.

3 Hold the toner cartridge horizontally as illustrated, and then shake it in the plastic bag from side to side about 10 times.



★ Important

- ☐ Do not open the shutter on the bottom of the toner cartridge. Toner may leak.

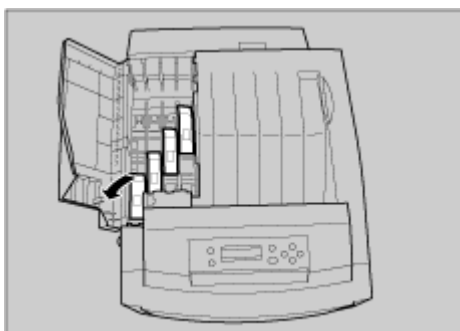


↓ Note

- ☐ The illustration uses the black cartridge as an example.

4 Take out the toner cartridge from the plastic bag.

5 Remove the adhesive tapes.

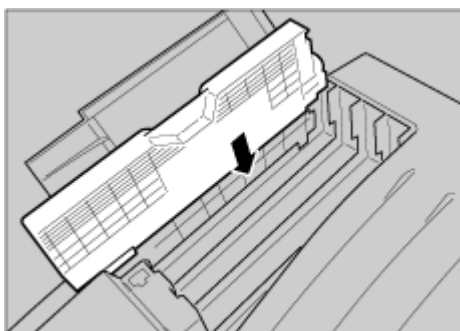


AJT0605

6 Check the toner color and location are correct, and then carefully insert the toner cartridge vertically.



- ☐ You can check the location for each toner cartridge by reading the labels on the printer.



ZHSH481E

- ☐ The illustration uses the yellow cartridge as an example.

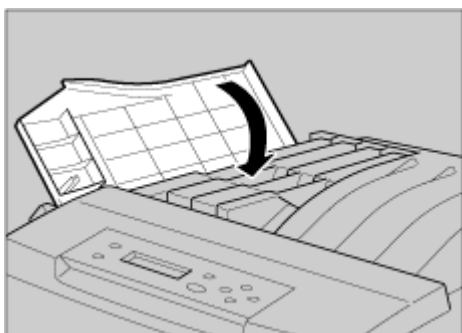
7 Push the toner cartridge in the direction of the arrow until it is securely positioned.



ZHSH481E

8 Repeat steps [2](#) to [7](#), to install the other color toner cartridges.

9 Close the printer's upper left cover.



AJT0475

Note

- ☐ If the toner cartridge is not set properly, you cannot close the upper left cover.

Loading Paper

The following describes how to load paper into the standard paper tray (Tray 1).

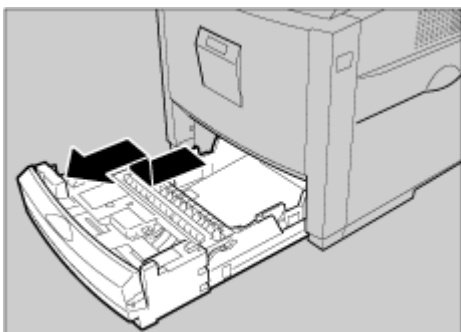
CAUTION

- *When pulling the paper tray out, be careful not to pull it strongly. If you do, the tray might fall and cause personal injury.*

Important

- ☐ To avoid paper jams, make sure paper is not stacked above the limit mark inside the tray. Misfeeds might occur.
- ☐ Do not mix different types of paper in a single paper tray.

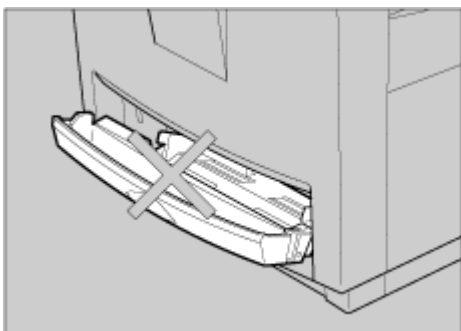
- 1** Pull the paper tray out of the printer until it stops. Lift it slightly, and then pull it fully out. Place the paper tray on a flat surface.



AJT0485

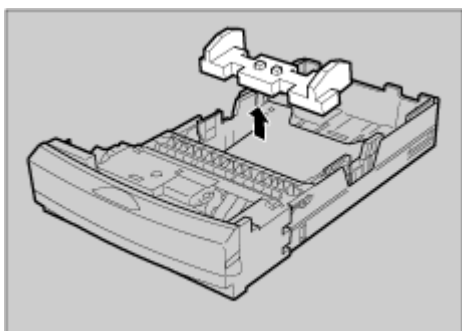
Note

- ☐ You cannot pull out Tray 1 if the Bypass Tray is open.



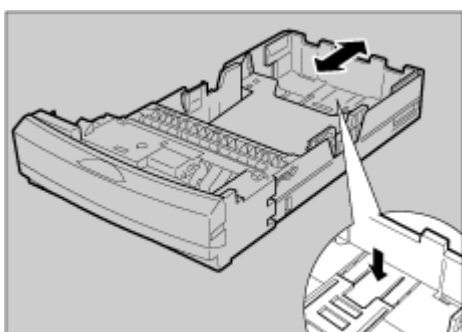
AJT0615

- 2** Remove the adhesive tape and packing material.



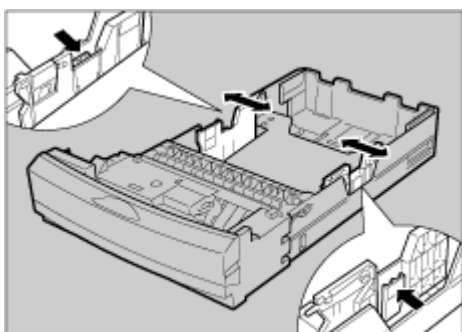
ZHBY020E

- 3** Press “PUSH”, and then adjust the rear guide to the paper size you want to load.



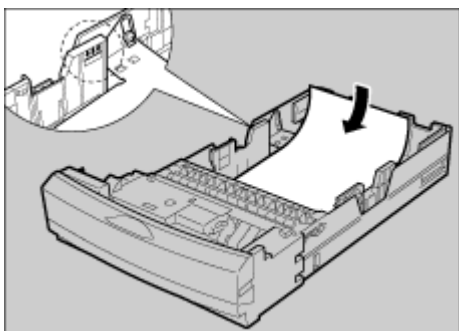
ZHBY042E

- 4** Adjust the side guides to the paper size you want to load.



AJT0835

5 Load paper print side up in the paper tray.

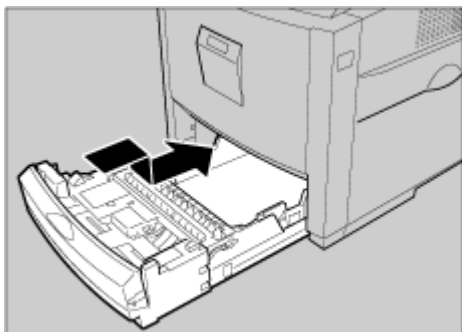


ZHBV020E

★ Important

- ☐ Make sure the top of the stack is not higher than the limit mark inside the tray.
- ☐ To avoid misfeeds, set the rear and side to the exact paper size.

6 Slide the paper tray fully into the printer.



AJT084S

Turning the Power On

Follow the procedure below to turn the power on.

WARNING

- *Plug and unplug the power cable with dry hands, or an electric shock could occur.*

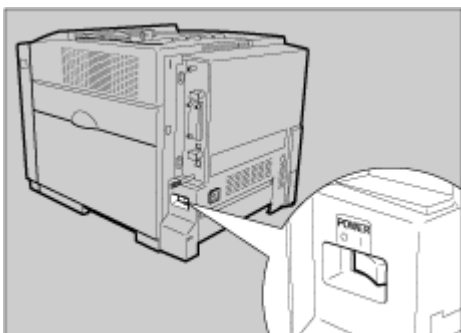
CAUTION

- *When you pull the plug out of the socket, grip the plug, not the cord, to avoid damaging the cord and causing a fire or an electric shock.*

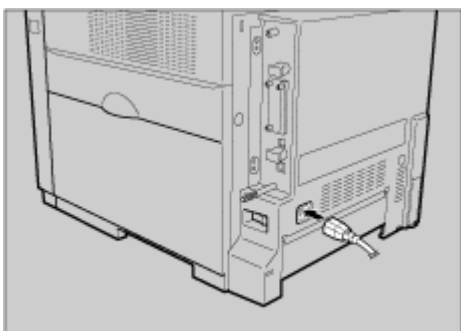
Important

- ☐ Be sure to connect the power plug to the socket or the wall outlet firmly.
- ☐ The printer power must be off when plugging in and removing the power cord.

1 Check the printer's power switch is set to Off ("O"). If it is set to On ("I"). Turn it off.

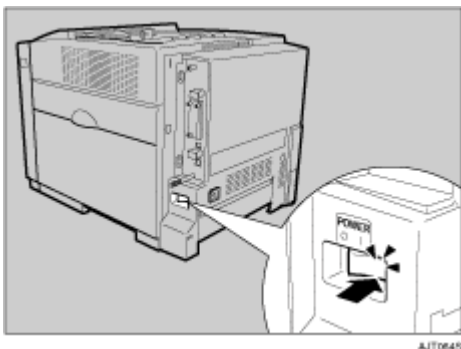


2 Attach the power cord to the socket on the back of the printer.



3 Plug the other end of the power cord securely into the wall outlet.

4 Turn the power switch to On (“ I ”).



The power indicator on the control panel lights.



- ☐ Wait until **[Ready]** appears on the display panel.
- ☐ The machine may make a noise while initializing. This noise does not indicate a malfunction.



- ☐ Do not turn off the power switch until initializing is completed. Doing so results in malfunction.

Selecting the Display Language

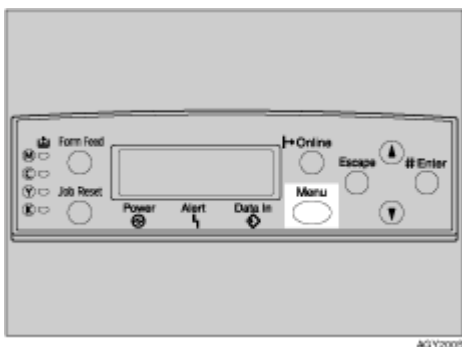
Select a language using the procedure described here.

The message for the selected language will appear on the display. If you want to use the display in English, the following procedures are unnecessary.

↓ Note

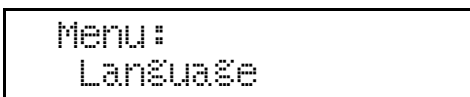
❑ The default setting is English.

1 Press the [Menu] key.

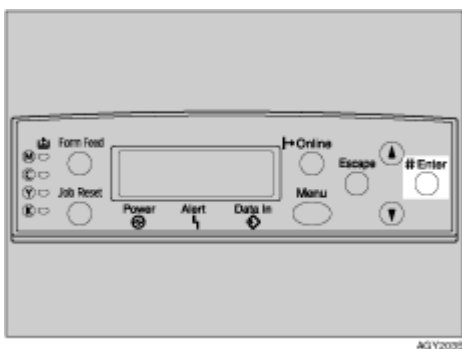


The [Menu] screen appears.

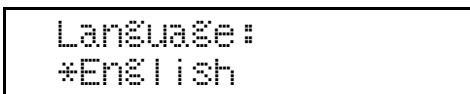
2 Press the [▲] or [▼] key to display [Language].



3 Press the [# Enter] key.



The following message appears on the display:

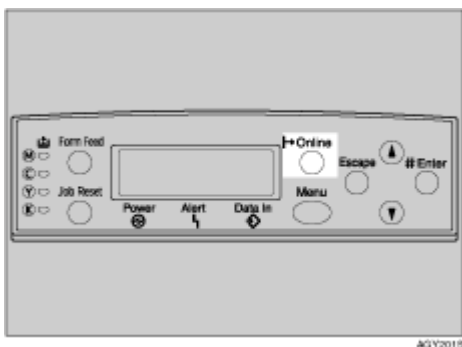


4 Press the [▲] or [▼] key until the language you want to select appears.

5 Press the [# Enter] key. Wait for two seconds.

[Menu] appears on the display.

6 Press the [Online] key.



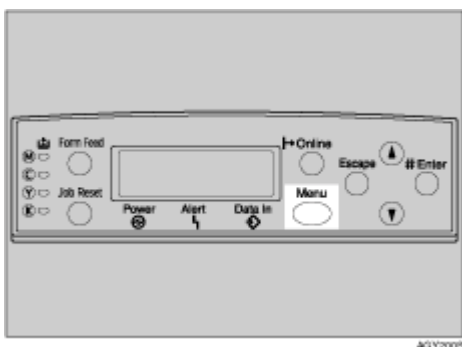
The initial screen appears.



Test Printing

The following explains the procedure for test printing of the configuration page. Test print in order to verify that the printer is working normally. Test printing checks printer performance only; it does not test the connection to the computer.

1 Press the [Menu] key.



The [Menu] screen appears.

```
Menu:
  Paper Input
```

2 Press the [▲] or [▼] key to display [List/Test Print], and then press the [# Enter] key.

```
Menu:
  List/Test Print
```

The menu for selecting the contents to be test printed appears.

3 Press the [▲] or [▼] key to display the [Config. Page], and then press the [# Enter] key.

```
List/Test Print:
  Config. Page
```

The following message appears and the configuration page is printed.

```
Printing...
```



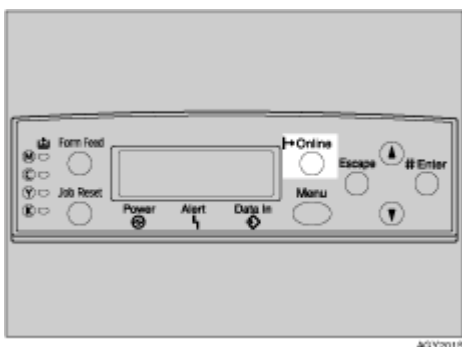
- ☐ If printing is not normal, check to see if an error message appears on the display. If there is an error message, see “Troubleshooting”, Maintenance Guide.

4 Check the options.



- ☐ For details about the configuration page, see “Interpreting the Configuration Page”, Software Guide.

5 Press the [Online] key.



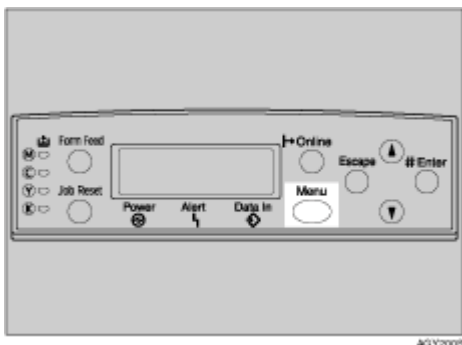
The initial screen appears.



Adjusting the Image Density

To use the printer in its best condition, adjust the image density.

- 1** Press the [Menu] key.



The [Menu] screen appears.

```
Menu:
Paper Input
```

- 2** Press the [▲] or [▼] key to display [Maintenance], and then press the [# Enter] key.

```
Menu:
Maintenance
```

- 3** Press the [▲] or [▼] key to display [Image Density], and then press the [# Enter] key.

```
Maintenance:
Image Density
```

- 4** The following message appears on the display.

```
Image Density:
Prt. Test Sheet
```

- 5** Press the [# Enter] key.

- 6** The following message appears on the display, and then Press the [# Enter] key.

```
Prt. Test Sheet
Press # to start
```

```
Printing...
```

- 7** Compare the colors on the printed image density test sheet with those on the image density adjusting card.

↓ Note

- ☐ If the image density of the image density adjusting card is equal to the framed part of the test sheet, you do not need to adjust the image density value.

- 8** Press the [▲] or [▼] key to select the color you want to adjust, and then press the [# Enter] key.

```
Image Density:
Black
```

- 9** Press the [▲] or [▼] key to set the image density value, and then press the [# Enter] key.

```
Black:
(-10 +10)      0
```

↓ Note

- ☐ You can adjust the image density from -10 to +10. Increasing the value makes the printouts darker and decreasing the value makes the printouts lighter.
- ☐ Pressing the [▲] or [▼] key makes the value increase or decrease by one.

- 10** To adjust another color, repeat the steps to [8](#).

Print another image density test sheet and check if the colors on the test sheet now match those on the image density adjusting card. If they still do not match, adjust the image density again.

- 11** Press the [Online] key.

The initial screen appears.

```
Ready
```

Available Options

This section describes how to install options.

By installing options, you can improve the printer performance and have an expanded variety of features to use. For the specifications of each option, see Maintenance Guide.

CAUTION

- *Before installing options, the machine should be turned off and unplugged for at least an hour. Components inside the machine become very hot, and can cause a burn if touched.*
- *Before moving the machine, unplug the power cable from the outlet. If the cable is unplugged abruptly, it could become damaged. Damaged plugs or cables can cause an electrical or fire hazard.*
- *When lifting the machine, use the grips on both sides. The machine could break or cause an injury if dropped.*

Important

- ❑ The voltage rating of the connector for options is 24 V DC or less.

Option Installation Flow Chart

We recommend you install multiple options in the following order:

1 Attach the paper feed unit (Paper Feed Unit Type 3000).

Attach the paper feed unit to the bottom of the printer.

You can attach up to two paper feed unit. Up to 1690 sheets of paper can be loaded.

2 Install the duplex unit (AD440) to the back of the front cover.

3 Install the SDRAM module (Memory Unit Type D 128MB, Memory Unit Type E 256MB).

Install the module to the SDRAM module slot on the controller board.

There are two types of memory unit: 128 MB and 256 MB.

4 Install the printer hard disk (Printer Hard Disk Type 3000).

Install the printer hard disk to the controller board.

5 Install the user account enhance unit (User Account Enhance Unit Type E).

Install the module to the user account enhance unit slot of the controller board.

6 Install the IEEE 1394 interface board, IEEE 1284 interface board, IEEE 802.11b interface unit or Bluetooth interface unit.

Install the IEEE 1394 interface board, IEEE 1284 interface board, IEEE 802.11b interface unit or Bluetooth interface unit on the controller board.

The IEEE 1394 interface board and standard Ethernet interface cannot be used at the same time.

Up to two of the following can be installed:

- IEEE 1394 Interface Board Type B
- IEEE 1284 Interface Board Type A
- IEEE 802.11b Interface Unit Type H
- Bluetooth Interface Unit Type 3245

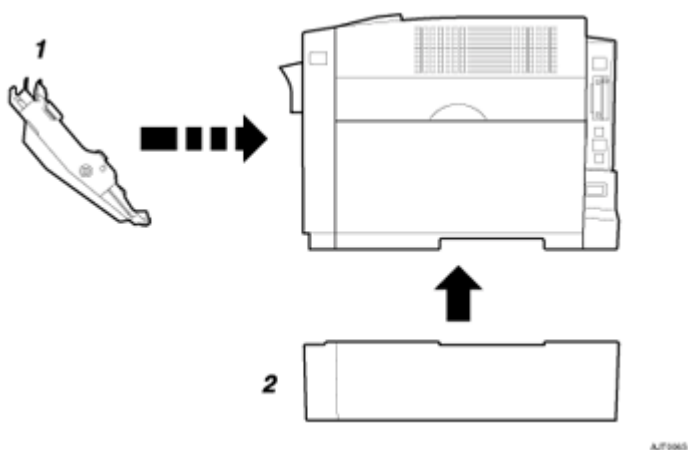
7 Install the network data protection unit (Network Data Protection Unit Type C).

Insert the network data protection unit into the SD card slot on the controller board.

Installing Options

Install options in the positions shown in the illustration.

❖ Exterior



1. AD440 (Duplex Unit)

Install this behind the front cover. Makes duplex prints.

See [p.52 “Attaching AD440 \(Duplex Unit\)”](#).

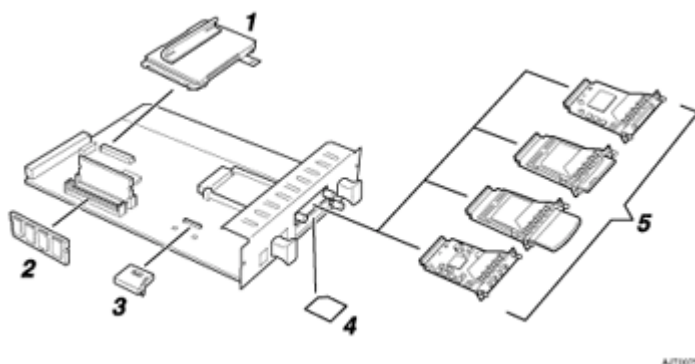
2. Paper Feed Unit Type 3000

Loads up to 530 sheets of paper.

Up to two paper feed units, can be installed on the printer. Installed tray units are identified as “Tray 2” and “Tray 3”.

See [p.47 “Attaching Paper Feed Unit Type 3000”](#).

❖ Interior



1. Printer Hard Disk Type 3000

See [p.60 “Attaching Printer Hard Disk Type 3000”](#).

2. Memory Unit Type D 128MB/Memory Unit Type E 256MB (SDRAM module)

Install 128 MB or 256 MB SDRAM module into the controller board slot.

See [p.55 “Attaching Memory Unit Type D 128MB, Memory Unit Type E 256MB \(SDRAM Module\)”](#).

3. User Account Enhance Unit Type E

See [p.66 “Attaching User Account Enhance Unit Type E”](#).

4. Network Data Protection Unit Type C

See [p.83 “Attaching Network Data Protection Unit Type C”](#).

5. IEEE 1394 Interface Board Type B / IEEE 802.11b Interface Unit Type H / Bluetooth Interface Unit Type 3245 / IEEE 1284 Interface Board Type A

See [p.70 “Attaching IEEE 1394 Interface Board Type B”](#).

See [p.73 “Attaching IEEE 802.11b Interface Unit Type H”](#).

See [p.77 “Attaching Bluetooth Interface Unit Type 3245”](#).

See [p.81 “Attaching IEEE 1284 Interface Board Type A”](#).

↓ Note

- ☐ You can install only one of the following types of extension board: IEEE 1394 Interface Board Type B ; IEEE 802.11b Interface Unit Type H ; Bluetooth Interface Unit Type 3245 ; IEEE 1284 Interface Board Type A.
- ☐ Some printer models come with the expansion duplex unit contained as default.

📖 Reference

For the specifications of each option, see Maintenance Guide.

Attaching Paper Feed Unit Type 3000

Preparation

When installing multiple options, install the paper feed unit first.

CAUTION

- *The printer weighs approximately 32 kg (70.5 lb.). When moving the printer, use the inset grips on both sides, and lift slowly. The printer will break or cause injury if dropped.*

CAUTION

- *Lifting the paper feed unit carelessly or dropping it may cause injury.*

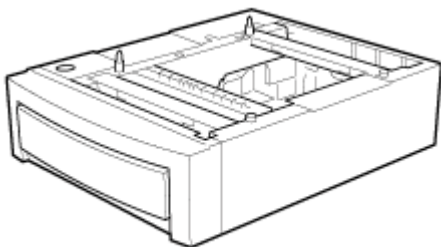
Important

- ☐ The paper feed unit weighs approximately 7.5 kg (16.5 lb.).
- ☐ Up to two paper feed units can be attached to the printer.
- ☐ When two paper feed units are installed, they are identified as “Tray 2” and “Tray 3” starting from the upper unit.
- ☐ Before using the new paper feed unit, you must make settings in the printer driver.

1 Turn off the power, and then unplug the power cable.

2 Check the package contains the following:

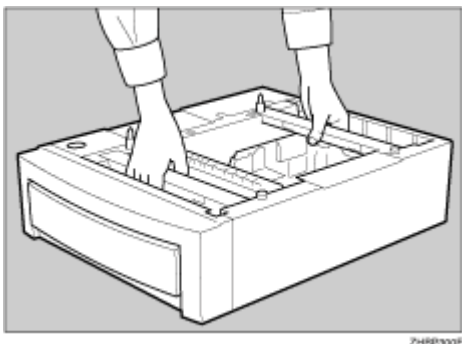
- ❖ Paper Feed Unit / Paper tray (inside the Paper Feed Unit)



ZHEP010E

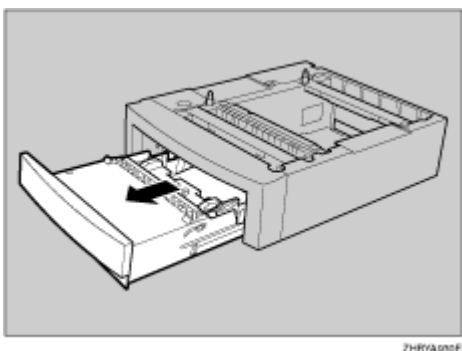
3 Remove the adhesive tape.

- 4** Hold the paper feed unit as shown in the illustration, and then place it on a flat surface near where the machine is to be installed.

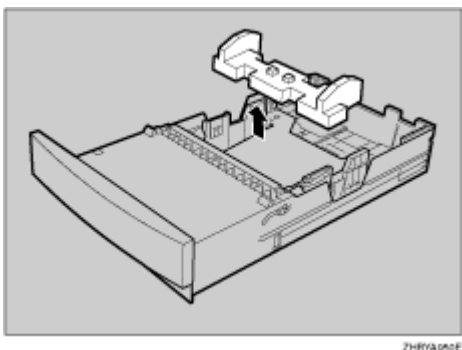


- ☐ Make sure you have enough space to access the back of the printer.

- 5** Pull the paper tray out of the paper feed unit until it stops. Lift it slightly, and then pull it fully out. Place the paper tray on a flat surface.

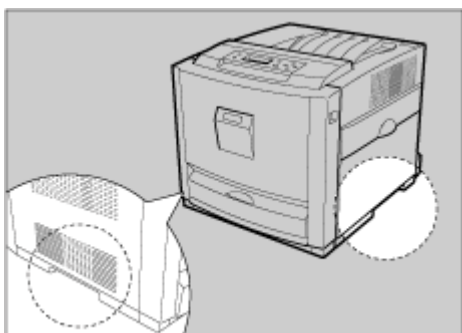


- 6** Remove the adhesive tape and packing material.



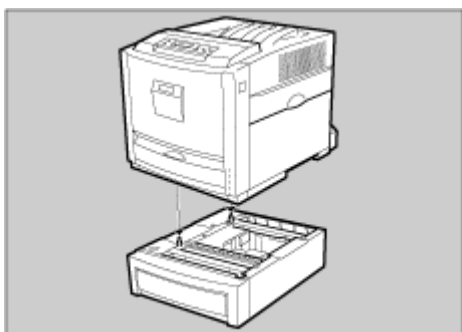
- 7** Slide the paper tray fully into the paper feed unit.

- 8** Lift using the inset grips on both sides of the printer.



AJT0435

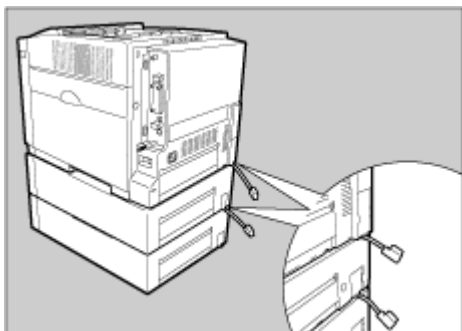
- 9** Align the printer with the two upright pins on the paper feed unit, and then lower it slowly.



AJT0495

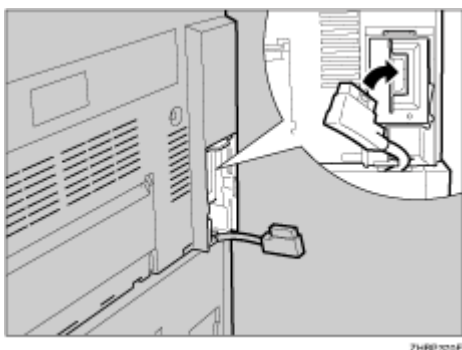


- ☐ Be sure not to place the printer on the paper feed unit cable.

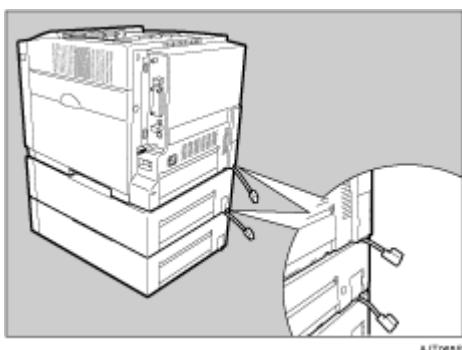


AJT0655

- 10** Connect the paper feed unit cable securely to the socket inside the printer.



To connect two paper feed units, connect the paper feed unit cable securely to the socket inside the paper feed unit



★ Important

- ☐ Before using the new paper feed unit, you must make settings in the printer driver.

↓ Note

- ☐ When moving or transporting the printer, make sure to unplug the paper feed unit connector. For more information, see “Moving and Transporting the Printer” in the Maintenance Guide.
- ☐ When moving the printer, remove the paper feed unit.
- ☐ After finishing installation, check the paper feed unit is installed properly: print the configuration page from the “List/Test Print” menu. If it is installed properly, you will see “Tray 2” or “Tray 2, Tray 3” for “Options”.
- ☐ If the paper feed unit is not installed properly, reinstall it from the start of the procedure. If you cannot install it properly even after attempting reinstallation, contact your sales or service representative.


📖 Reference

For details about printing the configuration page, see [p.40 “Test Printing”](#).
See “Loading Paper”, Maintenance Guide.

When adjusting the printing position, see “Adjusting Tray Registration”, Maintenance Guide.

Attaching AD440 (Duplex Unit)

CAUTION

- The inside of this machine gets very hot. Do not touch labelled “

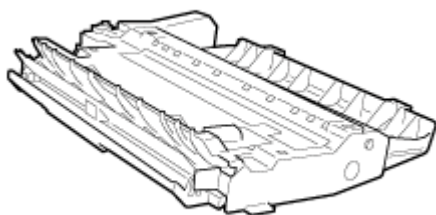
Important

- ☐ Before using the duplex unit, you must make settings in the printer driver.

1 Turn off the power, and then unplug the power cable.

2 Check the contents of the package for the following:

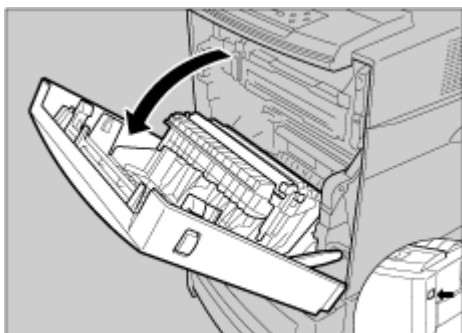
- ❖ AD440 (Duplex Unit)



ZHEP240E

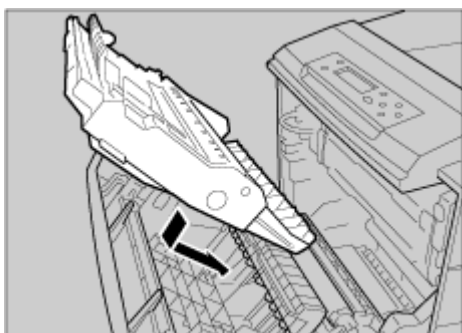
3 Remove the adhesive tape.

4 Open the front cover by pushing the front cover release button.



AJT0505

- 5** Hold the duplex unit as shown in the illustration, and then insert it into the inside of the front cover.



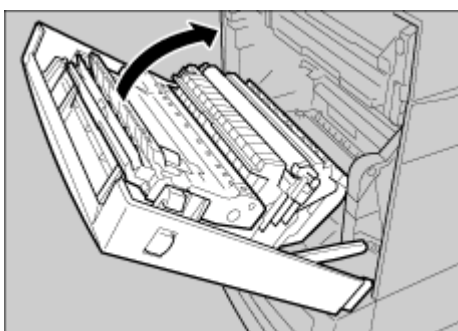
AJT0815



ZHBP280E

Align the arrows, and then insert the duplex unit until it clicks.

- 6** Close the front cover.



ZHBP282E

Note

- ☐ After finishing installation, check the duplex unit is installed properly: print the configuration page from the “List/Test Print” menu. If it is installed properly, you will see “Duplex Unit” for “Options”.
- ☐ If the duplex unit is not installed properly, reinstall it from the start of the procedure. If you cannot install it properly even after attempting reinstallation, contact your sales or service representative.



For details about printing the configuration page, see [p.40 “Test Printing”](#).

Attaching Memory Unit Type D 128MB, Memory Unit Type E 256MB (SDRAM Module)

CAUTION

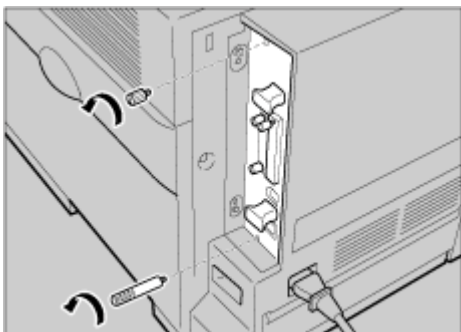
- Do not touch the inside of the controller board compartment. Doing so may cause a malfunction or a burn.

Important

- ☐ Before touching the memory unit, ground yourself by touching something metal to discharge any static electricity. Static electricity can damage the memory unit.
- ☐ Do not subject the memory unit to physical shocks.
- ☐ Available memory varies depending on model type.
- ☐ Before using the new memory unit, you must make settings in the printer driver.

1 Turn off the power, and then unplug the power cable.

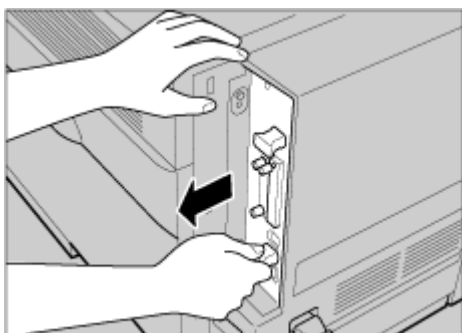
2 Remove the two screws securing the controller board to the back of the printer.



Note

- ☐ These screws will be used again in step [11](#) to secure the controller board.

- 3** Hold the machine with one hand, grasp the handle with the other hand, and then slowly pull out the controller board.

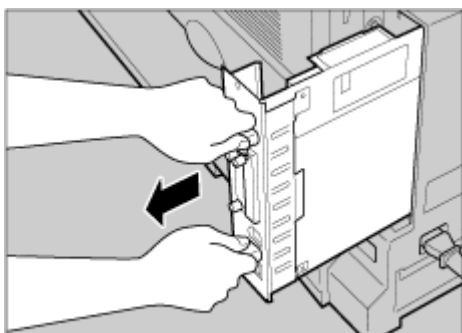


AJT0095



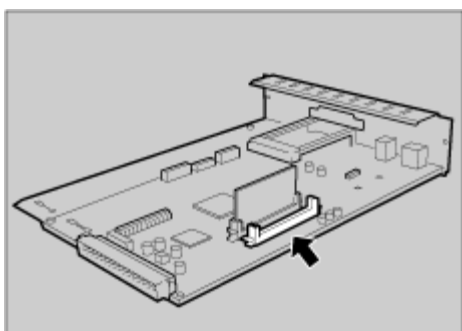
- ☐ The controller board may be difficult to pull out.

- 4** Hold the handles with both hands, and then pull the controller board completely out.



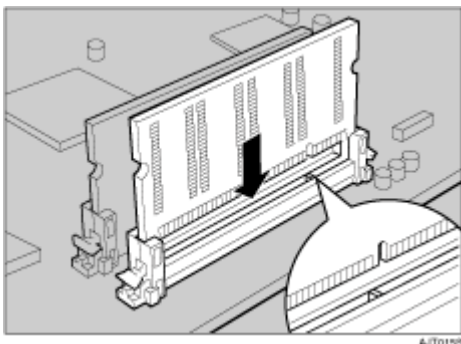
AJT0095

There are two slots for the Memory Unit. Use the available slot to install an optional Memory Unit



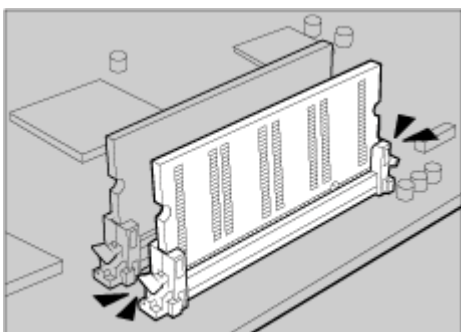
AJT0105

- 5** Adjust the notch of the Memory Unit to the slot, and then insert vertically.



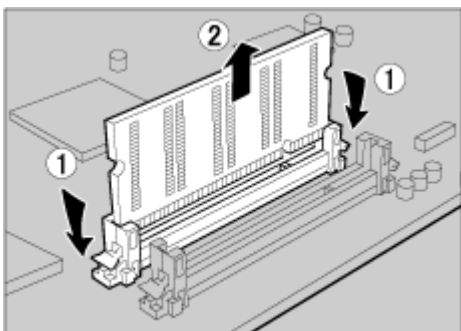
AJT0155

- 6** Press the Memory Unit down until it clicks into place.



AJT0165

- 7** When replacing the default SDRAM module, press down the levers on both sides (①) to remove the default module (②).



AJT0175

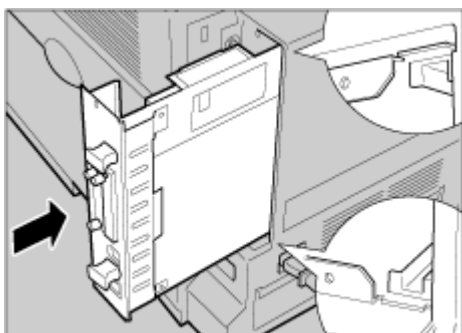
Install a new SDRAM module.

Note

- ☐ To increase memory capacity to the maximum of 512 MB, remove the default SDRAM module, and then install two 256 MB SDRAM modules.

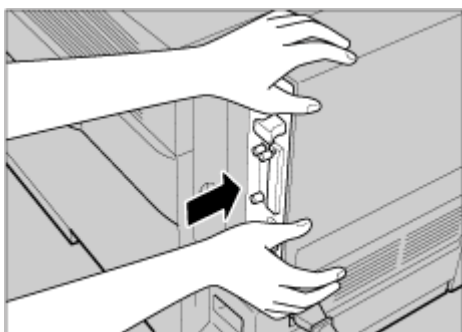
- 8** When installing other options on the controller board, do not close the controller board, but go to the steps for installing the option.

- 9** Align the controller board with the top and bottom rails, and then push it carefully in until it stops.



AJT0135

- 10** Hold the machine with one hand, and then push the lower handle of the controller board with the palm of your other hand, until it stops.

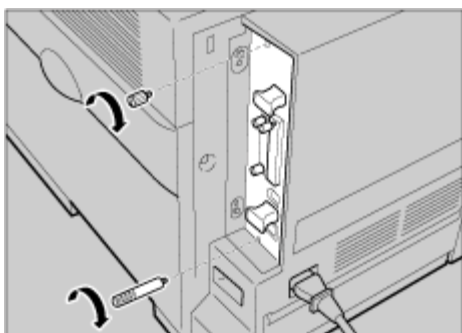


AJT055J

★ Important

- ☐ Malfunctions can occur if the controller board is not set properly.

- 11** Secure the controller board to the printer using the two screws removed in step [2](#).



AJT0145

↓ Note

- ☐ After finishing installation, check the memory unit is installed properly: print the configuration page from the “List/Test Print” menu. If it is installed properly, you will see the memory capacity for “Total Memory”.

- ☐ The table below shows total SDRAM module capacities.

| Standard | Extended | Total |
|----------|----------|--------|
| 128 MB | 128 MB | 256 MB |
| 128 MB | 256 MB | 384 MB |
| 256 MB | 128 MB | 384 MB |
| 256 MB | 256 MB | 512 MB |

- ☐ If the memory unit is not properly installed, reinstall it from the start of the procedure. If you cannot install it properly even after attempting reinstallation, contact your sales or service representative.

 **Reference**

For details about printing the configuration page, see [p.40 “Test Printing”](#).

Attaching Printer Hard Disk Type 3000

CAUTION

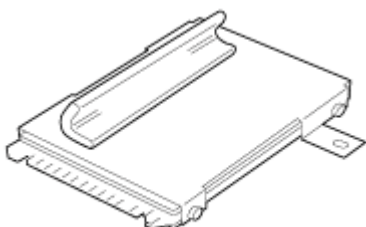
- Do not touch the inside of the controller board compartment. Doing so may cause a machine malfunction or a burn.

Important

- ☐ Before touching the printer hard disk, touch something metal to discharge any static electricity. Static electricity can damage the printer hard disk.
- ☐ Do not subject the printer hard disk to physical shocks.
- ☐ Before using the new printer hard disk, you must make the settings in the printer driver.

1 Check the package contains the following:

- ❖ Printer Hard Disk Type 3000



AJT0995

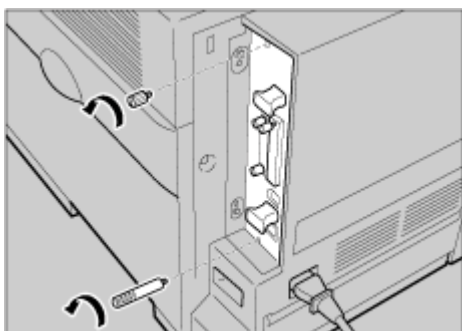
- ❖ Screw



AJT1025

2 Turn off the power, and then unplug the power cable.

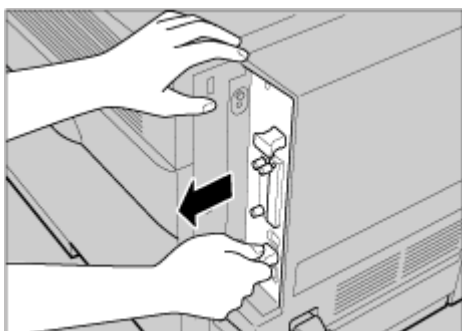
- 3** Remove the two screws securing the controller board to the back of the printer.



↓ Note

- ☐ These screws will be used again in step 11 to secure the controller board.

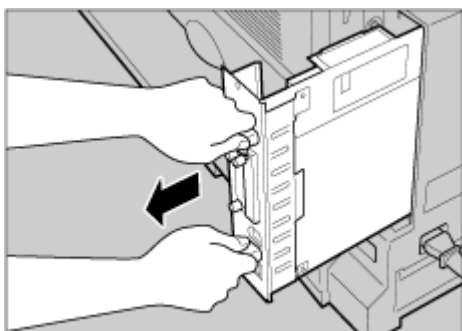
- 4** Hold the machine with one hand, grasp the handle with the other hand, and then slowly pull out the controller board.



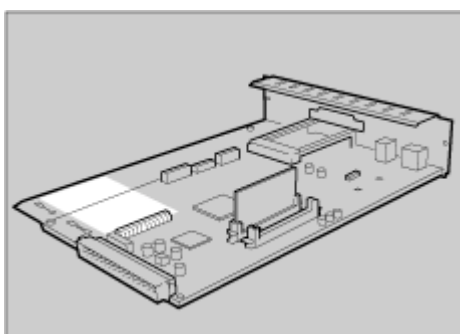
↓ Note

- ☐ The controller board may be difficult to pull out.

- 5** Hold the handles with both hands, and then pull the controller board completely out.

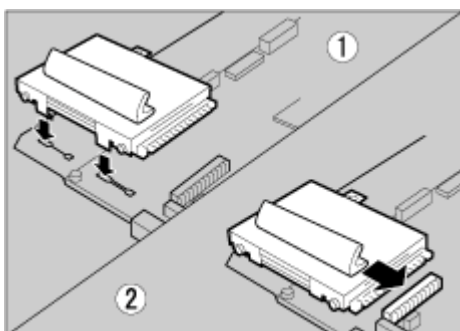


The printer hard disk is to be installed to the position shown in the illustration.



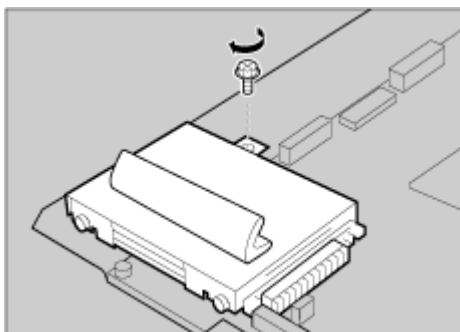
AJT0125

- 6** Insert the printer hard disk by aligning it with the controller board slot. Slide it in the direction of the arrow, and then connect it to the connector on the controller board.



AJT0205

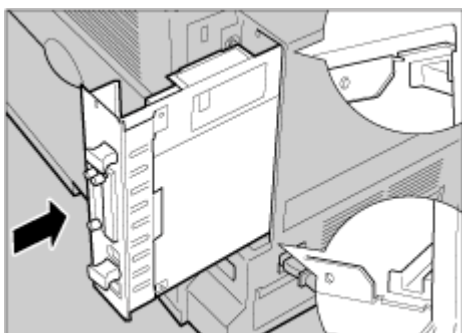
- 7** Secure the printer hard disk using the supplied screw.



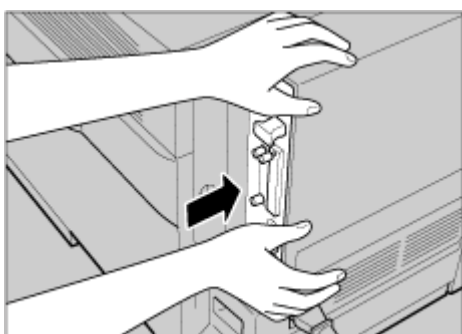
AJT0215

- 8** When installing other options on the controller board, do not close the controller board, but go to the steps for installing the option.

- 9** Align the controller board with the top and bottom rails, and then push it carefully in slowly until it stops.



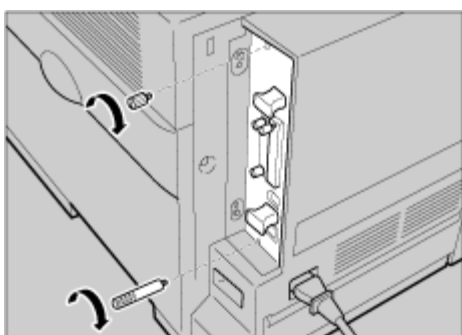
- 10** Hold the machine with one hand, and then push the lower handle of the controller board with the palm of your other hand, until it stops.



★ Important

❑ Malfunctions can occur if the controller board is not set properly.

- 11** Secure the controller board to the printer using the two screws removed in step [3](#).



When the power is turned on, the printer hard disk will be formatted automatically.

↓ Note

- ❑ After finishing installation, check the printer hard disk is installed properly: print the configuration page from the “List/Test Print” menu. If it is installed properly, you will see “Printer Hard Disk Drive” for “Controller Option”.
- ❑ If the printer hard disk is not installed properly, reinstall it from the start of the procedure. If you cannot install it properly even after attempting reinstallation, contact your sales or service representative.

📖 Reference

For details about printing the configuration page, see [p.40 “Test Printing”](#).

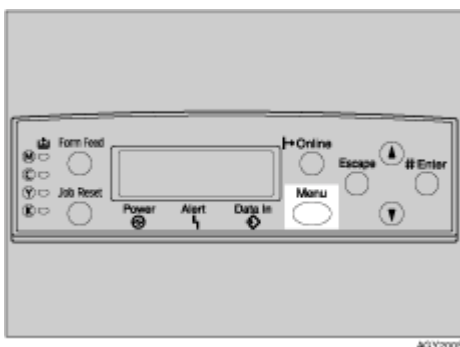
Formatting the Printer Hard Disk

If it becomes necessary to format the printer hard disk after initial setup, execute [HD Format] in the [Maintenance] menu.

★ Important

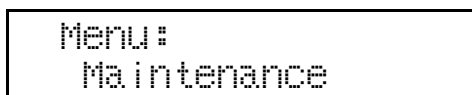
- ❑ Formatting the printer hard disk will delete all data.

1 Press the [Menu] key.



The [Menu] screen appears.

2 Press the [▲] or [▼] key to display [Maintenance], and then press the [# Enter] key.



The menu for selecting [Maintenance] items appears.

3 Press the [▲] or [▼] key to display [HD Format], and then press the [# Enter] key.

A check message appears.



- ☐ If **[HD Format]** is not displayed on the display, the printer hard disk is not installed properly. Repeat the procedure from step **1**. See [p.60 “Attaching Printer Hard Disk Type 3000”](#). If you still cannot install it properly, contact your sales or service representative.



- ☐ To avoid malfunction, do not turn off the power while formatting the printer hard disk.

4 Press the [# Enter] key.

The printer hard disk is formatted, and a restart message appears.

5 Turn off the power, and then turn it back on.

The printer hard disk format is completed, and now ready for use.

Attaching User Account Enhance Unit Type E

CAUTION

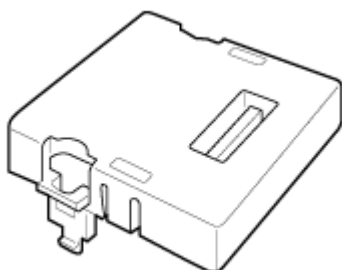
- Do not touch the inside of the controller board compartment. Doing so may cause a malfunction or a burn.

Important

- ☐ Before touching the user account enhance unit, ground yourself by touching something metal to discharge any static electricity. Static electricity can damage the user account enhance unit.
- ☐ Do not subject the user account enhance unit to physical shocks.

1 Check the package contains the following:

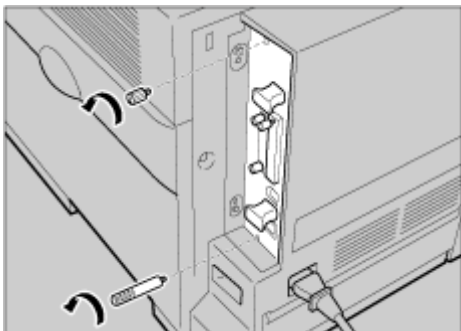
- ❖ User Account Enhance Unit Type E



AET0805

2 Turn off the power, and then unplug the power cable.

3 Remove the two screws securing the controller board to the back of the printer.

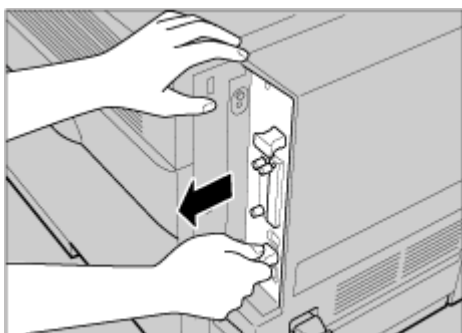


AJT0085

Note

- ☐ These screws will be used again in step [10](#) to secure the controller board.

- 4** Hold the machine with one hand, grasp the handle with the other hand, and then slowly pull out the controller board.

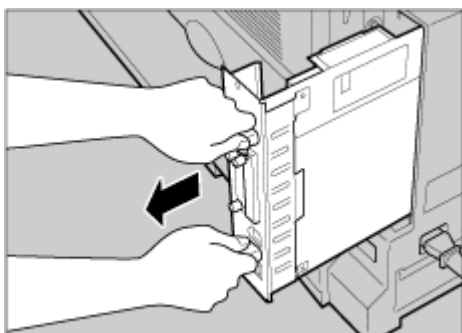


AJT0095



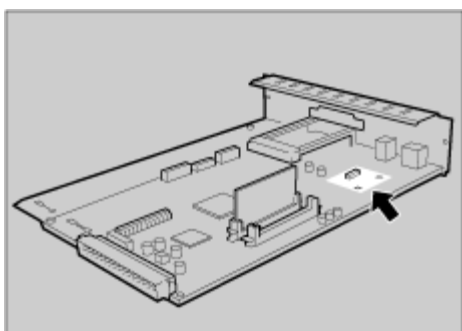
- ☐ The controller board may be difficult to pull out.

- 5** Hold the handles with both hands, and then pull the controller board completely out.



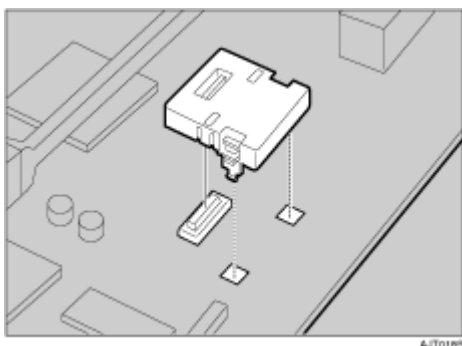
AJT0096

The user account enhance unit is to be installed to the position shown in the illustration.

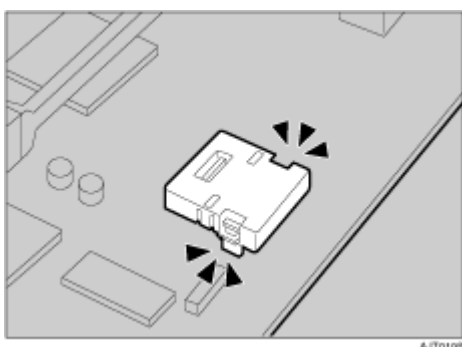


AJT0115

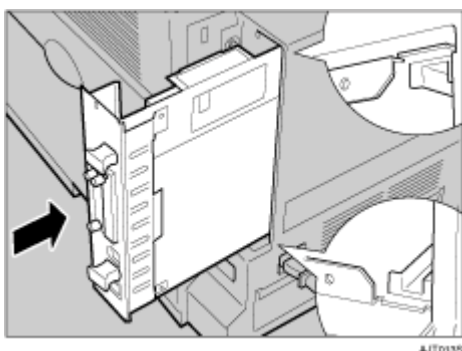
- 6** Align the notch of the user account enhance unit, and then insert it into the controller board, pressing it down until it clicks into place.



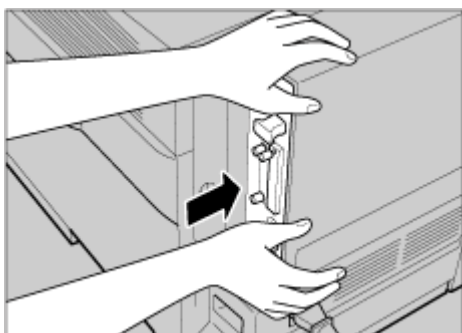
- 7** Make sure that the user account enhance unit is firmly connected to the controller board.



- 8** Align the controller board with the top and bottom rails, and then push it carefully in until it stops.



- 9** Hold the machine with one hand, and then push the lower handle of the controller board with the palm of your other hand, until it stops.

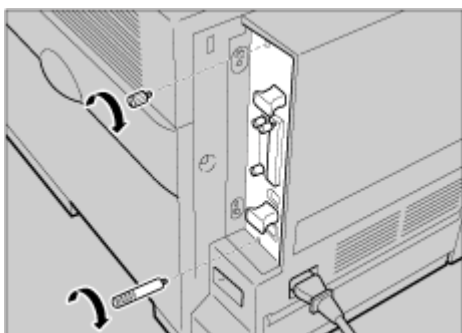


AJT003J

★ Important

- ☐ Malfunctions can occur if the controller board is not set properly.

- 10** Secure the controller board to the printer using the two screws removed in step [3](#).



AJT014S

↓ Note

- ☐ After finishing installation, check the user account enhance unit is installed properly: print the configuration page from the “List/Test Print” menu. If it is installed properly, you will see “Accounting Module” for “Controller Option”.
- ☐ If the user account enhance unit is not installed properly, reinstall it from the start of the procedure. If you cannot install it properly even after attempting reinstallation, contact your sales or service representative.

📖 Reference

For details about printing the configuration page, see [p.40 “Test Printing”](#).

Attaching IEEE 1394 Interface Board Type B

CAUTION

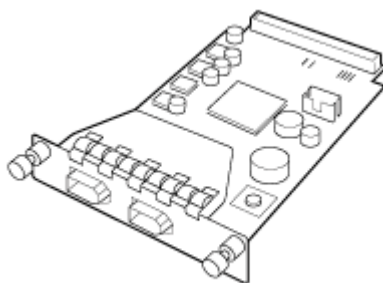
- *Do not touch the inside of the controller board compartment. Doing so may cause a malfunction or a burn.*

Important

- ☐ The 1394 interface board uses “IP over 1394” and “SCSI print”. Operating system-compatible connection methods are as follows (IEEE 1394 cannot be used with Windows 95/98 and Windows NT 4.0):
 - Windows Me
“IP over 1394”
 - Windows 2000
“SCSI print”
 - Windows XP, Windows Server 2003
“IP over 1394”, “SCSI print”
- ☐ Under Windows 2000, the 1394 interface board can only be used with Service Pack 1 or later. The client cannot install the printer driver without using an account that has administrators access rights.
- ☐ Before touching the 1394 interface board, ground yourself by touching something metal to discharge any static electricity. Static electricity can damage the 1394 interface board.
- ☐ Do not plug or unplug the 1394 interface cable while installing the printer driver.
- ☐ Use the 1394 interface cable that comes with 1394 interface board.

1 Check the package contains the following:

- ❖ IEEE 1394 Interface Board Type B



ABT00051

❖ Interface Cable (6 × 6 pins)

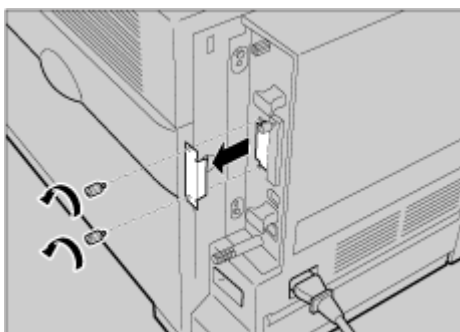


❖ Interface Cable (6 × 4 pins)



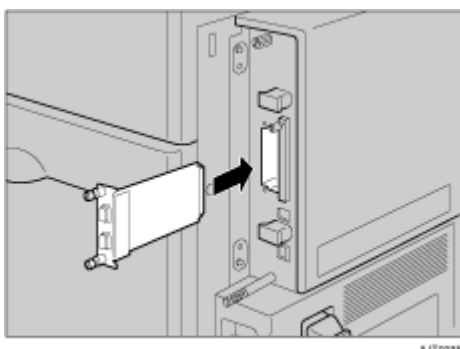
2 Turn off the power, and then unplug the power cable.

3 Loosen the two screws and remove the cover of the 1394 interface board installation unit.



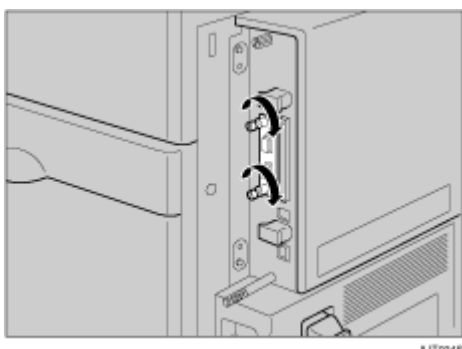
The removed cover and two screws are not used when installing the 1394 interface board.

4 Fully insert the 1394 interface board.



Make sure that the 1394 interface board is firmly connected to the controller board.

5 Tighten the two screws to secure the 1394 interface board.



Note

- ☐ After finishing installation, check the 1394 interface board is installed properly: print the configuration page from the “List/Test Print” menu. If it is installed properly, you will see “IEEE1394 ” for “Controller Option”.
- ☐ If the 1394 interface board is not installed properly, reinstall it from the start of the procedure. If you cannot install it properly even after attempting re-installation, contact your sales or service representative.

Reference

For details about printing the configuration page, see [p.40 “Test Printing”](#).

Attaching IEEE 802.11b Interface Unit Type H

CAUTION

- *Do not touch the inside of the controller board compartment. Doing so may cause a machine malfunction or a burn.*

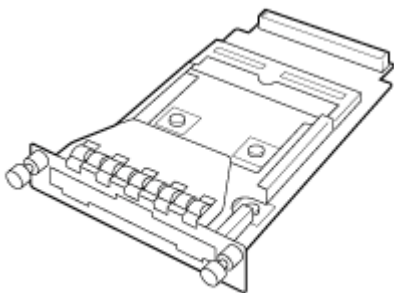
Important

- ☐ Before touching the 802.11b interface unit, touch something metal to discharge any static electricity. Static electricity can damage the 802.11b interface unit.
- ☐ Do not subject the 802.11b interface unit to physical shocks.

1 Check the contents of the package for the following:

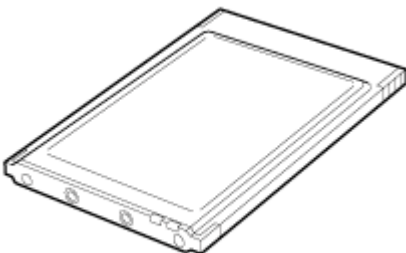
❖ IEEE 802.11b Interface Unit Type H

- Interface Unit



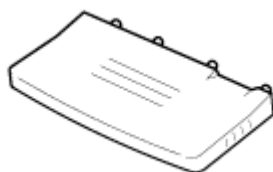
AAL1515

- Card



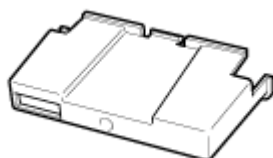
ZHBP420E

- Antenna



ZHBP430E

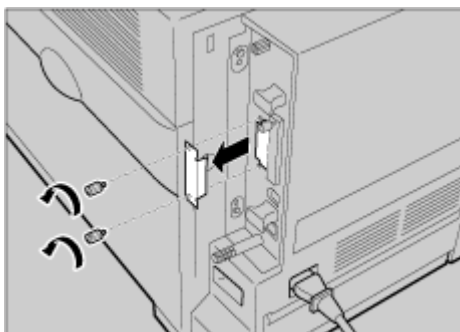
- Antenna Cap



AAL0005

2 Turn off the power, and then unplug the power cable.

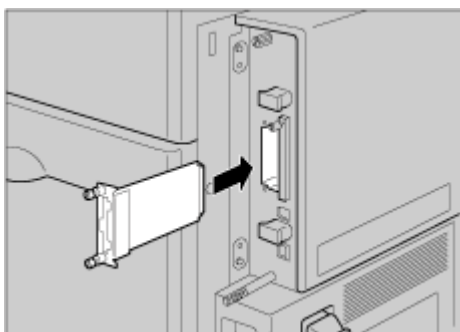
3 Loosen the two screws and remove the cover of the 802.11b interface unit installation unit.



AJT0255

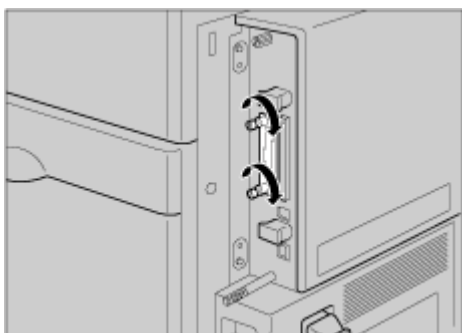
The removed cover and two screws are not used when installing the interface unit.

4 Fully insert the 802.11b interface unit.

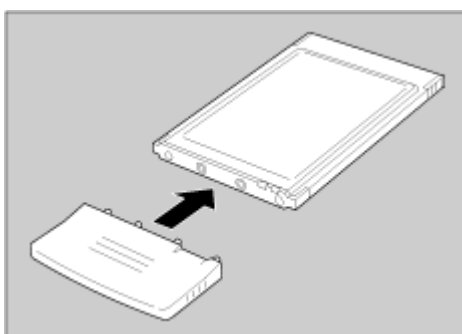


AJT0255

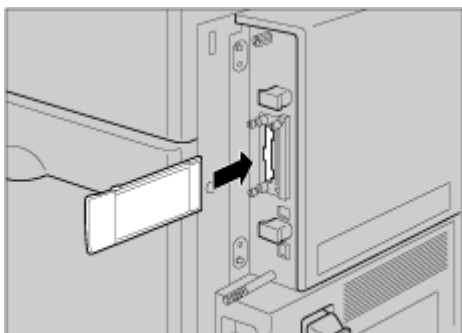
- 5** Tighten the two screws to secure the interface unit.



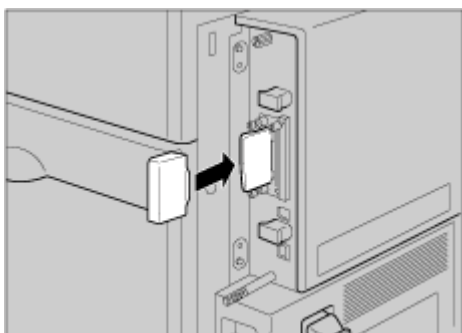
- 6** Attach the antenna to the card with the label facing down and the uneven side of the antenna facing up.



- 7** With the antenna and indented end toward the printer front cover, slowly insert the interface card until it stops.



- 8** Holding the antenna cap with the two cut off corners toward the printer front cover, fit the cap over the card.



AJT0285

↓ Note

- ☐ After finishing installation, check the 802.11b interface unit is installed properly: print the configuration page from the “List/Test Print” menu. If it is installed properly, you will see “IEEE 802.11b” for “Controller Option”.
- ☐ If the 802.11b interface unit is not installed properly, reinstall it from the start of the procedure. If you cannot install it properly even after attempting reinstallation, contact your sales or service representative.

☰ Reference

For details about printing the configuration page, see [p.40 “Test Printing”](#).

Attaching Bluetooth Interface Unit Type 3245

CAUTION

- *Do not touch inside the controller board compartment. Doing so may cause a machine malfunction or a burn.*

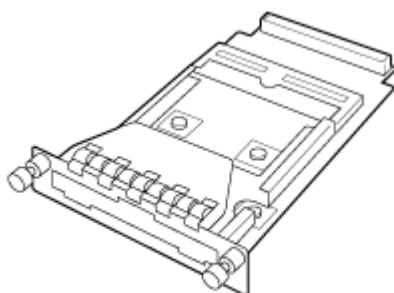
Important

- ☐ When using the printer with the Bluetooth interface unit installed, Bluetooth needs to be installed on the computer.
- ☐ Before manipulating the Bluetooth interface unit, touch something metal to discharge static electricity. Static electricity thing damage the Bluetooth interface unit.
- ☐ Do not subject the Bluetooth interface unit to physical shocks.

1 Check the contents of the package for the following:

❖ Bluetooth Interface Unit Type 3245

- Interface Unit



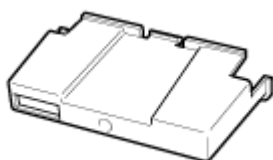
AAL1515

- Card



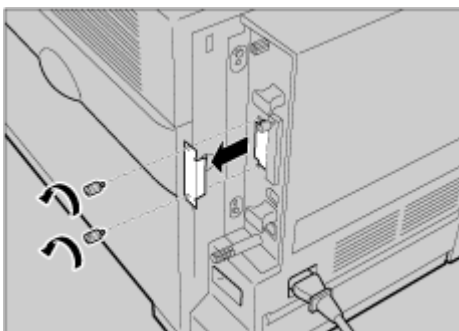
ZHEP510E

- Antenna Cap



AAL0005

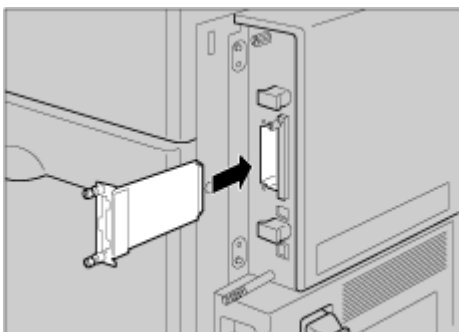
- 2** Turn off the power, and then unplug the power cable.
- 3** Loosen the two screws and remove the cover of the Bluetooth interface unit installation unit.



AJT0025

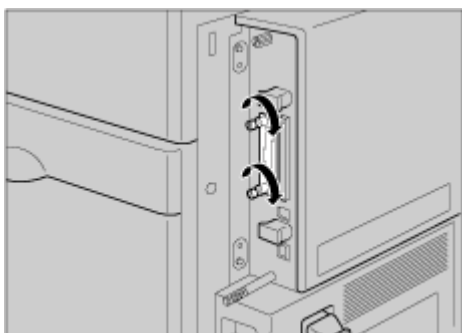
The removed cover and two screws are not used when installing the interface unit.

- 4** Fully insert the Bluetooth interface unit.

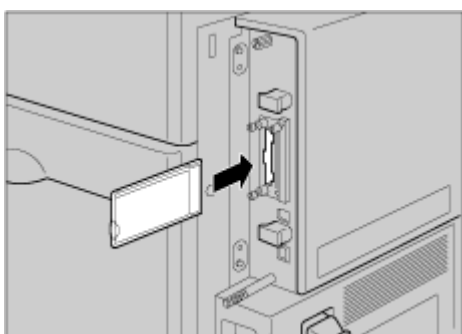


AJT0025

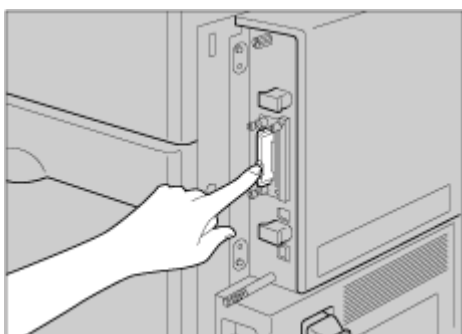
- 5** Tighten the two screws to secure the interface unit.



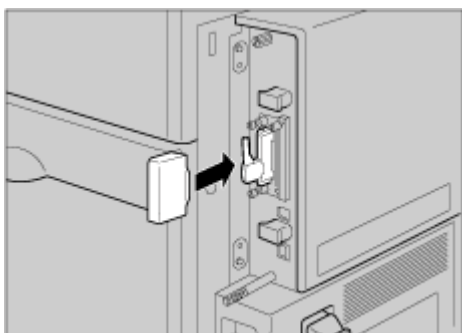
- 6** With the “INSERT” side toward the printer front cover, slowly insert the card into the Bluetooth interface unit until it stops.



- 7** Press the antenna to extend it.



- 8** Holding the antenna cap with the two cut off corners toward the printer front cover, fit the cap over the card.



AJT0015

↓ Note

- ☐ After finishing installation, check the Bluetooth interface unit is installed properly: print the configuration page from the “List/Test Print” menu. If it is installed properly, you will see “Bluetooth” for “Controller Option”.
- ☐ If the Bluetooth interface unit is not installed properly, reinstall it from the start of the procedure. If you cannot install it properly even after attempting reinstallation, contact your sales or service representative.

☰ Reference

For details about Bluetooth interface unit, see the manual that comes with the Bluetooth interface board.

For details about printing the configuration page, see [p.40 “Test Printing”](#).

Attaching IEEE 1284 Interface Board Type A

CAUTION

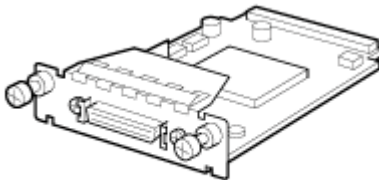
- Do not touch inside the controller board compartment. Doing so may cause a machine malfunction or a burn.

Important

- ☐ Before manipulating the 1284 interface board, touch something metal to discharge static electricity. Static electricity thing damage the 1284 interface board.
- ☐ Do not subject the 1284 interface board to physical shocks.

1 Check the package contains the following:

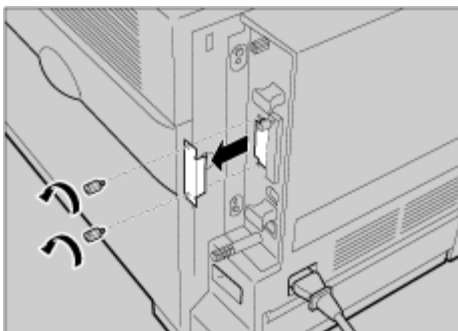
- ❖ IEEE 1284 Interface Board Type A



ABT04151

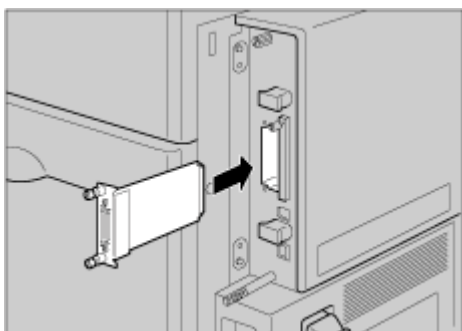
2 Turn off the power, and then unplug the power cable.

3 Loosen the two screws and remove the cover of the 1284 interface board installation unit.



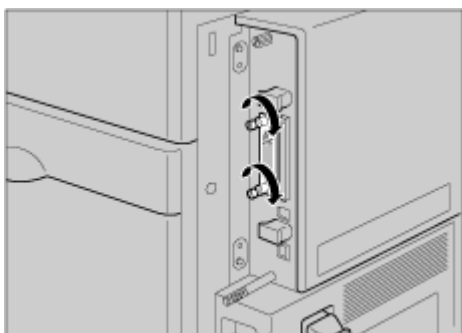
AJT0225

The removed cover and two screws are not used when installing the 1284 interface board.

4 Fully insert the 1284 interface board.

AJT0025

Confirm that the 1284 interface board is firmly connected to the controller board.

5 Tighten the two screws to secure the 1284 interface board.

AJT0025

Note

- ☐ Use the supplied adaptor to make the connection with the computer.
- ☐ After finishing installation, check the 1284 interface board is installed properly: print the configuration page from the “List/Test Print” menu. If it is installed properly, you will see “Parallel Interface” for “Controller Option”.
- ☐ If the 1284 interface board is not installed properly, reinstall it from the start of the procedure. If you cannot install it properly even after attempting re-installation, contact your sales or service representative.

Reference

For details about printing the configuration page, see [p.40 “Test Printing”](#).

Attaching Network Data Protection Unit Type C

★ Important

- ❑ Protect the network data protection unit from physical shocks.

↓ Note

- ❑ Use the under slot for the data protection unit.

1 Check the package contains the following:

- ❖ Network Data Protection Unit Type C



AET1045

2 Turn off the power, and then unplug the power cable.

3 Remove the cover the controller board's central expansion card slot.

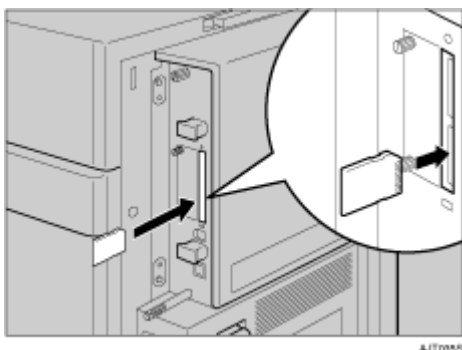


AJT1045

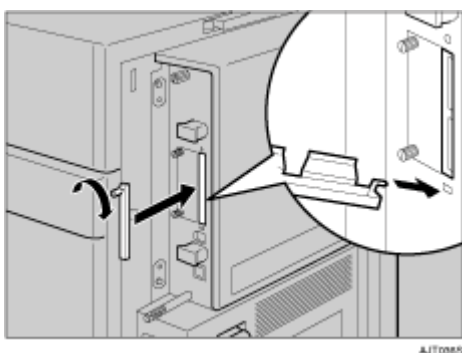
↓ Note

- ❑ The removed cover is used again in step **5** to reattach the controller board.

- 4** Carefully insert the network data protection unit, until the card clicks into the place.



- 5** Reattach the cover over the network data protection unit. Fasten the screw to secure the cover.



Note

- ☐ Do not touch the network data protection unit while the machine is in use. It may come loose, even if pushed only slightly.

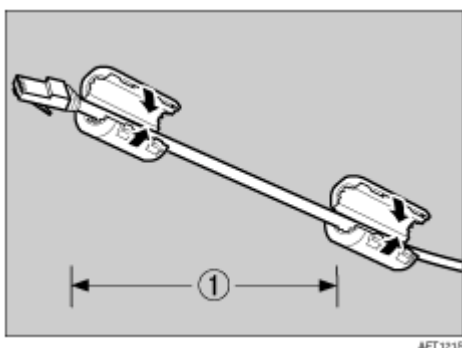
Network Connection

Follow the procedure below to connect the printer to the computer through the network. Prepare the hub and other network devices before connecting the 10 BASE-T or 100 BASE-TX cable to the machine's Ethernet port.

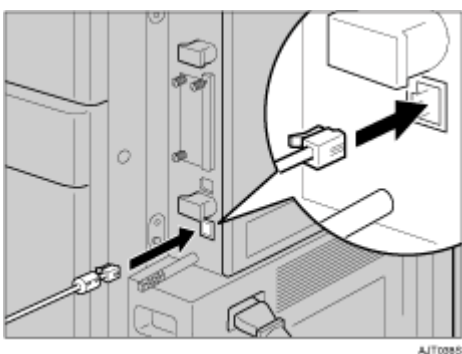
★ Important

- ❑ Use shielded Ethernet cable. Unshielded cables create electromagnetic interference that could cause malfunctions.
- ❑ Ethernet cable is not supplied with this machine. Select your cable according to the network environment.

- 1** Attach one ferrite core at the printer end of the Ethernet cable, and then attach the other ferrite core about 10 cm (4 inches) (①) from this core.



- 2** Connect the Ethernet cable to the Ethernet port.

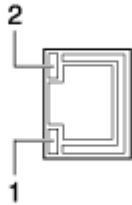


- 3** Connect the other end of the cable to the printer's network, such as a hub.

☰ Reference

For details about network environment settings, see Software Guide.

Reading the LED Lamps



AJIT0095

1. Yellow: lit when 100 BASE-TX is being used. Unlit when 10 BASE-T is being used.

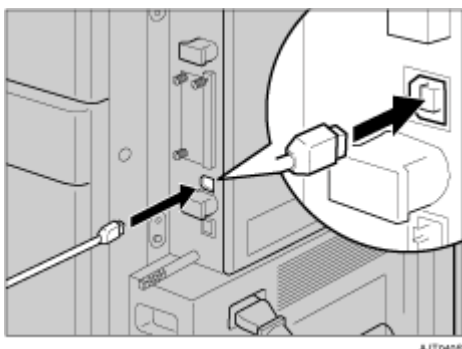
2. Green: lit when the printer is properly connected to the network.

USB Connection

★ Important

- ❑ USB2.0 interface cable is not supplied. Obtain it separately, according to the computer you are using.
- ❑ USB connection is possible under Windows 98 SE/Me/2000/XP, Windows Server 2003, Mac OS X v10.3.3 or higher.
- ❑ Windows 98 SE/Me supports USB1.1 speeds.
- ❑ Mac OS X supports only the standard USB port.

- 1** Connect the square-shaped connector of the USB2.0 cable to the USB port.



AJT0495

- 2** Connect the opposite end's flat connector to devices such as your computer's USB interface, or a USB hub.

📖 Reference

For details about settings for USB connection printing, see Software Guide.

Parallel Connection

★ Important

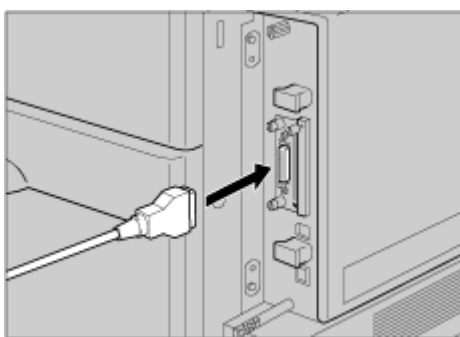
- ❑ The parallel interface cable is not provided with the printer.
- ❑ The printer's parallel connection is a standard bidirectional interface that requires an IEEE 1284-compliant 36-pin parallel cable and host computer parallel port.
- ❑ Use shielded interface cable. Unshielded cables create electromagnetic interference that could cause malfunctions.

1 Turn off the printer and computer.

2 Connect the cable to the interface connector of the IEEE 1284 interface board.

★ Important

- ❑ Voltage rating of the computer's parallel port: DC 5 V (max.)



AJT0415

3 Securely attach the other end of the parallel cable to your computer's parallel port. Secure the cable.

Reference

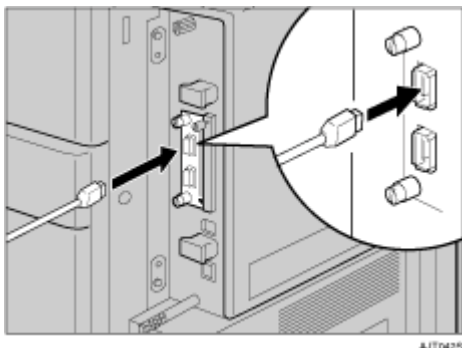
For details about settings for parallel connection printing, see Software Guide.

IEEE 1394 Connection

★ Important

- ☐ Use the 1394 interface cable provided with the 1394 interface board.
- ☐ You cannot plug devices together to create loops.
- ☐ Do not use a cable more than 4.5 meters (14.8 feet) long.

1 Connect the interface cable to the 1394 interface board.



2 Connect the other end to the host computer.

↓ Note

- ☐ You can use either connector.
- ☐ Either of the two connectors for the 1394 interface unit can be used.
- ☐ If you have an interface cable with a ferrite core, connect the ferrite core end to the printer.

📖 Reference

For details about settings for IEEE 1394(IP over 1394, SCSI print) connection printing, see Software Guide.

Ethernet Configuration

Make the following network settings according to the network interface you are using.

You can use SmartDeviceMonitor for Admin or a Web browser to make IP address-related settings in a TCP/IP-capable environment.

★ Important

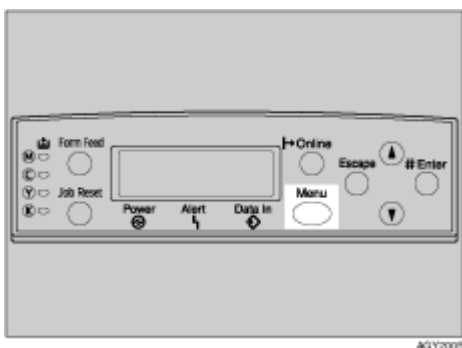
- ❑ Configure the printer for the network using the control panel.
- ❑ The following table shows the control panel settings and their default values. These items appear in the **[Host Interface]** menu.

| Setting Name | Value | |
|-----------------|-----------------|--------|
| DHCP | On | |
| IP Address | 011.022.033.044 | |
| Subnet Mask | 000.000.000.000 | |
| Gateway Address | 000.000.000.000 | |
| Frame Type (NW) | Auto Select | |
| Active Protocol | TCP/IP | Active |
| | NetWare | Active |
| | SMB | Active |
| | Apple-Talk | Active |
| Ethernet Speed | Auto Select | |
| LAN Type | Ethernet | |

↓ Note

- ❑ If DHCP is in use, the IP address, subnet mask, and gateway address are all set automatically.
- ❑ Make this setting only when it is necessary. See Software Guide.

1 Press the **[Menu]** key.



The [Menu] screen appears.

- 2** Press the [▲] or [▼] key to display [Host Interface] menu, and then press the [# Enter] key.

```
Menu:
Host Interface
```

The interface setting menu appears.

- 3** Press the [▲] or [▼] key to display [Network Setup], and then press the [# Enter] key.

The network setup menu appears.

- 4** Press the [▲] or [▼] key to display [Active Protocol], and then press the [# Enter] key.

- 5** Press the [▲] or [▼] key to select Active Protocol, and then press the [# Enter] key.

```
Active Protocol:
TCP/IP
```

The following example explains activating TCP/IP.

The “Active/Not Active” selection screen appears.

- 6** Press the [▲] or [▼] key to select [Active] or [Not Active], and then press the [# Enter] key.

```
TCP/IP:
*Active
```

After the settings are made, about two seconds later, the screen returns to the active protocol menu.

- 7** Set other protocols you need to set in the same way.
- 8** Press the [Escape] key, the screen returns to the network setup menu.

↓ Note

- ☐ The default is “Active”.
- ☐ Leave unused protocols “Not Active”.
- ☐ Enable TCP/IP to use the Pure IP environment of NetWare 5/5.1, NetWare 6/6.5.

- 9** If you use TCP/IP, assign the IP address to the printer. Press the [▲] or [▼] key to display [IP Address], and then press the [# Enter] key.

The current IP address appears on the display.

To get the IP address for the printer, contact your network administrator.

- 10** Press the **[▲]** or **[▼]** key to enter the left most entry field of the IP address, and then press the **[# Enter]** key.

```
IP Address:
192.022.033.044
```

Press the **[# Enter]** key, the screen changes, and the next field can then be entered.



- ☐ Do not set “011.022.033.044” as the IP address.
- ☐ The value moves by 10 if the **[▲]** or **[▼]** key is kept pressed.
- ☐ When the **[# Enter]** key is pressed, the cursor moves to the next field.
- ☐ To display the previous field, press the **[Escape]** key.
- ☐ Press the **[Escape]** key when no value is entered and the screen will return to the network setup menu, without the IP address changing.

- 11** Make the other settings in the same way, and then press the **[# Enter]** key.

```
IP Address:
192.168.000.010
```

After the settings are made, about two seconds later, the screen returns to the network setup menu.

- 12** If you use TCP/IP, assign [Subnet Mask] and [Gateway Address] following the same procedure for entering the IP address.

- 13** When you use this machine in DHCP environment, set DHCP to “On”.



- ☐ When DHCP is “On”, you cannot make settings for the following items:
 - IP Address
 - Subnet Mask
 - Gateway Address



- ☐ Consult your network administrator for information about making network settings.

- 14** Press the [▲] or [▼] key to display [DHCP], and then press the [# Enter] key.

```
Network Setup:
  DHCP
```

- 15** Press the [▲] or [▼] key to display [On], and then press the [# Enter] key.

```
DHCP:
*On
```

↓ Note

- ☐ “✖” shows the current setting.
- ☐ After about two seconds, the display returns to the network setup menu.

- 16** If you use NetWare, select the frame type for NetWare.

Select one of the items below if necessary.

- Auto Select (Default)
- Ethernet II
- Ethernet 802.2
- Ethernet 802.3
- Ethernet SNAP

↓ Note

- ☐ Usually, use the default setting (“Auto Select”). When you first select [Auto Select], the frame type detected by the printer is adopted. If your network can use more than two frame types, the printer may fail to select the correct frame type if [Auto Select] is selected. In this case, select the appropriate frame type.

- 17** Press the [▲] or [▼] key to display [Frame Type (NW)], and then press the [# Enter] key.

```
Network Setup:
  Frame Type (NW)
```

The current setting appears on the display.

- 18** Press the [▲] or [▼] key to display the frame type you want to use, and then press the [# Enter] key.

```
Frame Type (NW):
*Auto Select
```

After the settings are made, about two seconds later, the screen returns to the network setup menu.

19 Press the [Online] key.

The initial screen appears.

20 Print a configuration page to confirm the settings made.



For details about printing the configuration page, see [p.40 “Test Printing”](#).

IEEE 802.11b (Wireless LAN) Configuration

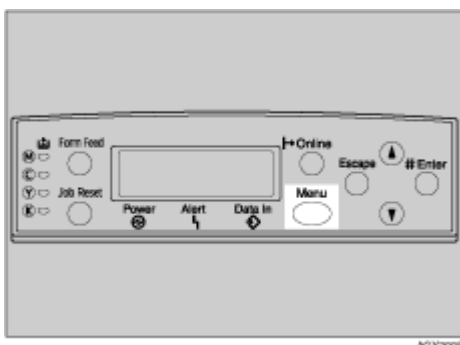
Configure the printer to use IEEE 802.11b (Wireless LAN). The following table shows the control panel settings and their default values. These items appear in the **[Host Interface]** menu.

| Setting Name | Default Value |
|--------------|-------------------------------|
| Comm. Mode | 802.11 Ad hoc |
| Channel | • Inch version (1-11) 11 |
| | • Metric version (1-13) 13 |
| Trans. Speed | Auto |
| SSID | blank (ASSID) |
| WEP Setting | Not Active |

↓ Note

- ☐ To use IEEE 802.11b (Wireless LAN), select **[IEEE 802.11b]** for **[LAN Type]** in **[Network Setup]** in the **[Host Interface]** menu, and then set **[IP Address]**, **[Subnet Mask]**, **[Gateway Address]**, **[DHCP]**, **[Frame Type (NW)]** and **[Active Protocol]** under **[Network Setup]**. For details about setting items under “Configuring the Printer for the Network”, see Software Guide.
- ☐ The 802.11b interface unit cannot be used simultaneously with a standard ethernet interface.
- ☐ In the **[SSID]** menu, if blank is specified in 802.11 Ad hoc mode or Ad hoc mode, “ASSID” appears.

1 Press the **[Menu]** key.



The **[Menu]** screen appears.

- 2** Press the [▲] or [▼] key to display [Host Interface] menu, and then press the [# Enter] key.

```
Menu:
Host Interface
```

The interface setting menu appears.

- 3** Press the [▲] or [▼] key to display [IEEE 802.11b] , and then press the [# Enter] key.

The [IEEE 802.11b] setting menu appears.

- 4** Press the [▲] or [▼] key to display [Comm. Mode], and then press the [# Enter] key.

- 5** Press the [▲] or [▼] key to select the transmission mode of IEEE 802.11b, and then press the [# Enter] key.

```
Comm. Mode:
*802.11 Ad hoc
```

After the settings are made, about two seconds later, the screen returns to the IEEE 802.11b setting menu.



- ☐ The factory default is “802.11 Ad hoc”.
- ☐ To use an IEEE 802.11b card for which the SSID (Network Name) setting is not necessary, select [Ad hoc].
- ☐ The transmission mode of IEEE 802.11b can also be set using a Web browser. For details, see Web browser, and “Configuring the Network Interface Board Using Web Browser”, Software Guide.

- 6** If [802.11 Ad hoc] or [Ad hoc] is selected for [Comm. Mode], set the channel to use for transmission.



- ☐ Confirm the network administrator for the channel to use.

- 7** Press the [▲] or [▼] key to display [Channel], and then press the [# Enter] key.

The channel currently used appears on the display.

- 8** Press the [▲] or [▼] key to enter the channel, and then press the [# Enter] key.

```
Channel :
(1-11)   11
```

9 Set [Trans. Speed] in the same way.

- ☐ The factory default is “Auto”. If you need to change the transmitting speed depending on environment you are using, select the appropriate transmitting speed.

10 If [Infrastructure] or [802.11 Ad hoc] is selected for [Comm. Mode], set [SSID] to use for transmission.

- ☐ Confirm the network administrator for SSID to use.
- ☐ SSID can also be set using a Web browser. For details, see the Web Image Monitor Help, and “Configuring the Network Interface Board Using Web Browser”, Software Guide.

11 Press the [▲] or [▼] key to display [SSID], and then press the [# Enter] key.

The following message appears on the display.



If an SSID has been set, you can check the set SSID. Press the [# Enter] key.

12 Press the [▲] or [▼] key to display [Enter ID], and then press the [# Enter] key.

The following message appears on the display.



The value in brackets at the upper right is the number of characters entered.

13 Press the [▲] or [▼] key to select characters, and then press the [# Enter] key.

You can now enter the next character.

14 Continue entering the key.

- ☐ The characters that can be used are ASCII 0x20-0x7e (32 bytes).
- ☐ To display the previous character, press the [Escape] key.

- 15** After entering the key, press the [# Enter] key twice.

```
SSID:      [32]
AAAAAAAAAAAAAAAAAAAA
```

After the settings are made, about two seconds later, the screen returns to the IEEE 802.11b setting menu.

- 16** In the case of using a WEP key on a network, activate the WEP setting to be used for communication along with WEP.

↓ Note

- ☐ Confirm the network administrator for the WEP Key to use.
- ☐ WEP key can also be set using a Web browser. For details, see Web Image Monitor Help.

- 17** Press the [▲] or [▼] key to display [WEP Setting], and then press the [# Enter] key.

The following message appears on the display.

```
WEP Setting:
*Not Active
```

- 18** Press the [▲] or [▼] key to display [Active], and then press the [# Enter] key.

The following message appears on the display.

```
Change WEP Key:
Yes (HEX)
```

↓ Note

- ☐ When setting the [WEP Setting] to [Active], you will need to enter the WEP key. If you have not entered the key, be sure to enter it.
 - ☐ If you have entered the WEP key and change the setting, press the [▲] or [▼] key to display [No], and then press the [# Enter] key.
- 19** Press the [▲] or [▼] key to display [Yes (HEX)] when inputting a hexadecimal WEP key or [Yes (ASCII)] when inputting an ASCII WEP key. Then press the [# Enter] key.

```
WEP Key:      [ 0]
■
```

The value in brackets at the upper right is the number of characters entered.

- 20** Press the **[▲]** or **[▼]** key to select characters, and then press the **[# Enter]** key.

```
WEP Key:      [ 1]
*█
```

You can now enter the next character.

```
WEP Key:      [ 2]
**█
```

Continue entering the key.



- ☐ When using 64 bit WEP, up to 10 characters can be used for hexadecimal and up to five characters for ASCII. When using 128 bit WEP, up to 26 characters can be used for hexadecimal and up to 13 characters for ASCII.
- ☐ The number of characters that can be entered is limited to 10 or 26 for hexadecimal and 5 or 13 for ASCII. If you try to enter too many characters, the following message appears:
 - hexadecimal

```
Error: Enter 10
or 26 characters
```

- ASCII

```
Error: Enter 5
or 13 characters
```

- ☐ For ASCII character strings, each capital letter and lowercase letter is recognized respectively.
- ☐ To display the previous character, press the **[Escape]** key.

- 21** After entering the key, press the **[# Enter]** key.

```
WEP Key:      [26]
*****A
```

After the settings are made, about two seconds later, the screen returns to the IEEE 802.11b setting menu.

- 22** Press the **[Online]** key.

The initial screen appears.

- 23** Print a configuration page to confirm the settings made.



For details about printing the configuration page, see [p.40 “Test Printing”](#).

IEEE 1394 Configuration

Use this procedure to configure the printer for use in an IEEE 1394 environment. The following table shows the control panel settings and their default values. These items appear in the **[Host Interface]** menu.

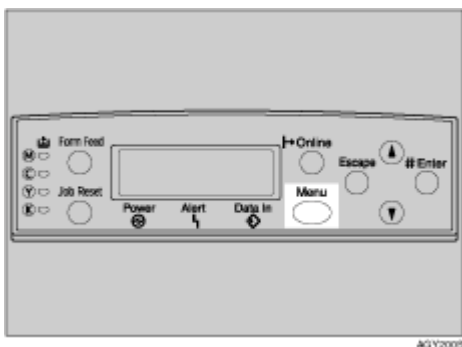
| Setting Name | Value |
|-----------------|-----------------|
| DHCP | On |
| IP Address1394 | 011.022.033.044 |
| Subnet Mask1394 | 000.000.000.000 |
| IP over 1394 | Active |
| SCSI print | Active |
| Bidi-SCSI print | On |

↓ Note

☐ If DHCP is in use, **[IP Address1394]** and **[Subnet Mask1394]** are automatically set.

IP over 1394

1 Press the **[Menu]** key.



The **[Menu]** screen appears.

2 Press the **[▲]** or **[▼]** key to display **[Host Interface]** menu, and then press the **[# Enter]** key.

```
Menu:
Host Interface
```

The interface setting menu appears.

3 Press the **[▲]** or **[▼]** key to display **[IEEE 1394 Setup]**, and then press the **[# Enter]** key.

The IEEE 1394 setting menu appears.

- 4** Press the [▲] or [▼] key to display [IP over 1394], and then press the [# Enter] key.

The IP over 1394 setting menu appears.

- 5** Press the [▲] or [▼] key to select either [Active] or [Not Active], and then press the [# Enter] key.

```
IP over 1394:
*Active
```

After the settings are made, about two seconds later, the screen returns to the IEEE 1394 setting menu.

- 6** Assign the IP address to the printer. Press the [▲] or [▼] key to display [IP Address1394], and then press the [# Enter] key.

The current IP address appears on the display.



- ☐ Do not set the same IP address as that used for the Ethernet network settings or in the same subnet. Also, do not specify the same subnet mask.
- ☐ Do not set “011.022.033.044” as the IP address.
- ☐ To get the IP address for the printer, contact your network administrator.

- 7** Press the [▲] or [▼] key to enter the left most entry field of the IP address, and then press the [# Enter] key.

```
IP Address1394:
19■.022.033.044
```

The pointer (■) moves to the next entry field automatically.

```
IP Address1394:
192.02■.033.044
```



- ☐ The value moves by 10 if the [▲] or [▼] key is kept pressed.
- ☐ You can return the pointer (■) to the previous (left) entry field by pressing the [Escape] key.
- ☐ If you press the [Escape] key when the pointer (■) is on the leftmost position, the selected IP address is reset.

- 8** Set other fields similarly, and then press the [# Enter] key.

The settings are made and after about two seconds, the screen returns to the IEEE 1394 setting menu.

- 9** Set [Subnet Mask1394] in the same way.

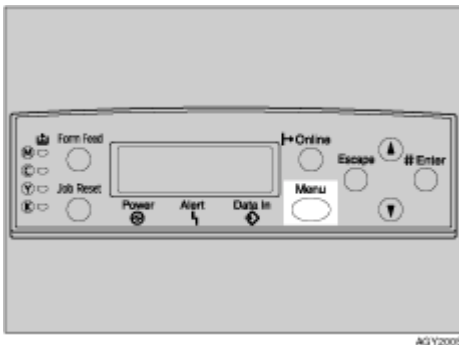
10 Press the [Online] key.

The initial screen appears.

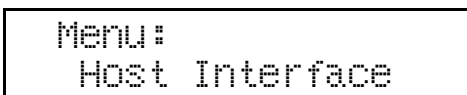
11 Print a configuration page to confirm the settings made.**Reference**

For details about printing the configuration page, see [p.40 “Test Printing”](#).

SCSI print

1 Press the [Menu] key.

The [Menu] screen appears.

2 Press the [▲] or [▼] key to display [Host Interface] menu, and then press the [# Enter] key.

The interface setting menu appears.

3 Press the [▲] or [▼] key to display [IEEE 1394 Setup], and then press the [# Enter] key.

The IEEE 1394 setting menu appears.

4 Set [SCSI print] and [Bidi-SCSI print] if necessary.**Note**

☐ The default setting is “Active”.

5 Press the [▲] or [▼] key to display [SCSI print], and then press the [# Enter] key.

- 6** Press the [▲] or [▼] key to select either [Active] or [Not Active], and then press the [# Enter] key.

SCSI Print:
*Active

After the settings are made, about two seconds later, the screen returns to the IEEE 1394 setting menu.

- 7** Set [Bidi-SCSI print] in the same way.

- 8** Press the [Online] key.

The initial screen appears.

- 9** Print a configuration page to confirm the settings made.



For details about printing the configuration page, see [p.40 “Test Printing”](#).

Quick Install

Windows 95/98/Me, Windows 2000/XP, Windows Server 2003, and Windows NT 4.0 users can easily install this software using the CD-ROM provided.

Using Quick Install, the PCL printer driver and/or RPCS printer driver and SmartDeviceMonitor for Client is installed under network environment, and TCP/IP port will be set.

★ Important

- ❑ To install printer driver under Windows 2000/XP Professional, Windows Server 2003, and Windows NT 4.0, you must have an account that has Manage Printers permission. Log on as an Administrator.
- ❑ The Quick Install is not available when using this printer under USB connection. If you connect using USB, see Software Guide.

1 Quit all applications currently running.

2 Insert the CD-ROM into the CD-ROM drive.

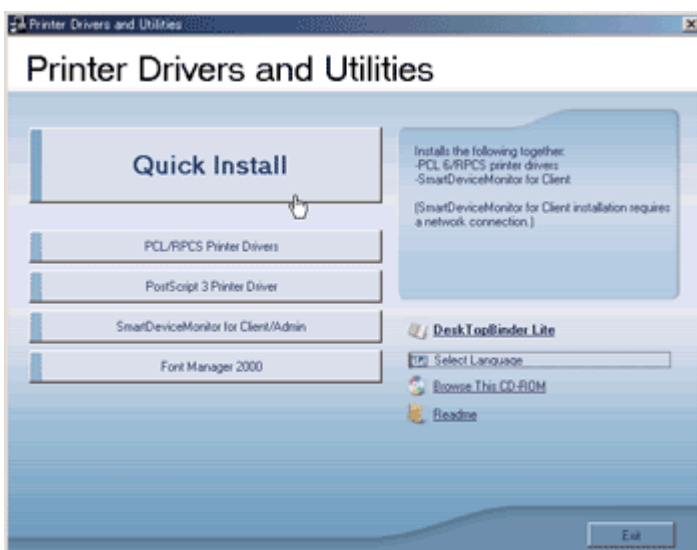
The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch “Setup.exe” on the CD-ROM root directory.

3 Select an interface language, and then click [OK].

The default interface language is English.

4 Click [Quick Install].



The software license agreement appears in the [License Agreement] dialog box.

5 After reading the agreement, click [I accept the agreement.], and then click [Next >].

6 Select the printer model you want to use in the [Select Printer] dialog box.



- ☐ For network connection via TCP/IP, select the printer whose IP address is displayed in [Connect To].
- ☐ For parallel connection, select the printer whose printer port is displayed in [Connect To].

7 Click [Install].

The printer driver installation starts.

8 Click [Finish]

A message about restarting the computer may appear. Restart the computer to complete installation.

9 Click [Exit] in the first dialog box of the installer, and then take out the CD-ROM.



- ☐ To stop installation of the selected software, click [Cancel] before installation is complete. Restart the computer, and then reinstall the other software or printer drivers.
- ☐ Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.
- ☐ Select a printer to whose IP address is displayed in [Connect To] to install SmartDeviceMonitor for Client when using TCP/IP.



Quick Install is not available unless bidirectional communication between the printer and computer is enabled via parallel connection. See "Install SmartDeviceMonitor for Client from the CD-ROM provided.", Software Guide, for details about bidirectional communication between printer and computer.

Install the Operating Instructions

The CD-ROM provided with the printer contains an HTML Operating Instructions Manual in HTML version. Follow the above instructions to install it.



❑ System Requirements :

- Windows 95/98/Me, Windows 2000/XP, Windows Server 2003 or Windows NT4.0.
- 800 x 600 or higher monitor resolution.

❑ Web Browsers :

- Microsoft Internet Explorer 4.01 SP2 or later.
- Netscape 6.2 or later.

- ❑ If you are using Internet Explorer 3.02 or earlier, or Netscape Navigator 4.05 or earlier as your Web browser, a simpler version of the Operating Instructions Manual is displayed.**

1 Quit all applications currently running.

2 Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work under certain operating system setting. If this is the case, launch “Setup.exe” on the CD-ROM root directory.

3 Select an interface language, and then click [OK].

4 Click [Install manuals].

5 Follow the instructions on the screen to complete the installation.

6 Click [Finish] when the installation is completed.

7 Click [Exit].



- ❑ Auto Run may not work under certain operating system setting. If this is the case, copy all datas on the CD-ROM root directory to your hard disk drive, and then launch “Setup.exe” to start the installation.
- ❑ To uninstall the Operating Instructions Manual, select **[Programs]** in the **[Start]** menu, select your printer driver, and then click **[uninstall]**. You can uninstall each Manual Guide separately.
- ❑ If you are using an incompatible Web browser and the simpler version of the Operating Instructions Manual does not correctly display correctly, open folder “MANUAL\R_MANUAL\US_ENG\ (SETUP or MAINTENANCE or SOFTWARE) \unv\” on the CD-ROM. Double-click on “index.htm”.



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Manuals for This Printer

For particular functions, see the relevant parts of the manual.

❖ **Setup Guide (HTML)**

Provides information about printer setup and options.

❖ **Maintenance Guide (HTML)**

Provides information about paper, replacing supplies, and dealing with paper jams and error messages.

❖ **Software Guide (HTML) (this manual)**

Provides basic information about installing the printer driver and software, using the printer in a network environment, and configuration and setup. Also, provides information about configuring and monitoring printer status using software and a Web browser.



- ☐ Some functions cannot be used depending on your printer.

Quick Install

Windows 95/98/Me/2000/XP, Windows Server 2003, and Windows NT 4.0 users can easily install this software using the CD-ROM provided.

Using Quick Install, the PCL printer driver and/or RPCS printer driver and Smart-DeviceMonitor for Client is installed under network environment, and TCP/IP port will be set.

★ Important

- ❑ To install printer driver under Windows 2000/XP Professional, Windows Server 2003, and Windows NT 4.0, you must have an account that has Manage Printers permission. Log on as an Administrator.
- ❑ The Quick Install is not available when using this printer under USB connection. If you connect using USB, see [p.52 "Installing the Printer Driver Using USB"](#).

1 Quit all applications currently running.

2 Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.

3 Select an interface language, and then click [OK].

The default interface language is English.

4 Click [Quick Install].

The software license agreement appears in the [License Agreement] dialog box.

5 After reading the agreement, click [I accept the agreement], and then click [Next].

6 Select the printer model you want to use in the [Select Printer] dialog box.

For network connection via TCP/IP, select the printer whose IP address is displayed in [Connect To].

For parallel connection, select the printer whose printer port is displayed in [Connect To].

7 Click [Install].

The printer driver installation starts.

8 Click [Finish].

A message about restarting the computer may appear. Restart the computer to complete installation.

9 Click [Exit] in the first dialog box of the installer, and then take out the CD-ROM.

 **Note**

- ☐ To stop installation of the selected software, click [**Cancel**] before installation is complete.
- ☐ Auto Run may not work with certain operating system settings. If this happens, launch “Setup.exe” on the CD-ROM root directory.
- ☐ Select a printer to whose IP address is displayed in [**Connect To**] to install SmartDeviceMonitor for Client when using TCP/IP.

 **Reference**

Quick Install is not available unless bidirectional communication between the printer and computer is enabled via parallel connection. See [p.72 “If Bidirectional Communication is Disabled”](#) for details about bidirectional communication between printer and computer.

Confirming the Connection Method

This printer supports network and local connection.

Before installing the printer driver, check how the printer is connected. Follow the driver installation procedure that is appropriate to the connection method.

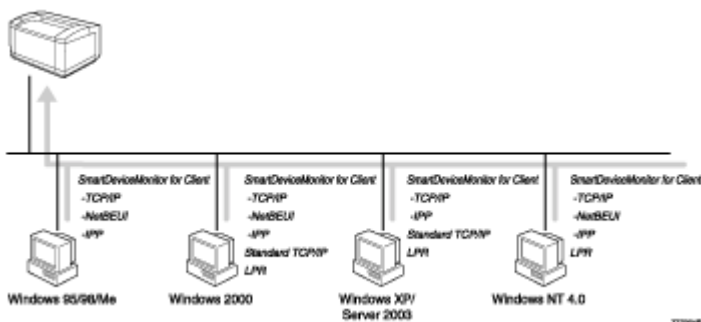
Network Connection

This printer can be used as a Windows printing port or network printer.

Using this printer as the Windows printing port

Network connections can be established through Ethernet, IEEE 802.11b, and IEEE 1394 (IP over 1394).

Available ports are determined based on the combination of Windows operating system version and connection method used.



❖ Windows 95/98

| Connection Method | Available Ports |
|--------------------------|------------------------------------|
| Ethernet/ IEEE 802.11b | SmartDeviceMonitor for Client port |
| IEEE 1394 (IP over 1394) | None |

❖ Windows Me

| Connection Method | Available Ports |
|--------------------------|------------------------------------|
| Ethernet/ IEEE 802.11b | SmartDeviceMonitor for Client port |
| IEEE 1394 (IP over 1394) | SmartDeviceMonitor for Client port |

❖ Windows 2000

| Connection Method | Available Ports |
|------------------------|---|
| Ethernet/ IEEE 802.11b | SmartDeviceMonitor for Client port Standard TCP/IP LPR port |

| Connection Method | Available Ports |
|--------------------------|-----------------|
| IEEE 1394 (IP over 1394) | None |

❖ **Windows XP**

| Connection Method | Available Ports |
|--------------------------|---|
| Ethernet/ IEEE 802.11b | SmartDeviceMonitor for Client port Standard TCP/IP LPR port |
| IEEE 1394 (IP over 1394) | SmartDeviceMonitor for Client port Standard TCP/IP |

❖ **Windows Server 2003**

| Connection Method | Available Ports |
|--------------------------|---|
| Ethernet/ IEEE 802.11b | SmartDeviceMonitor for Client port Standard TCP/IP LPR port |
| IEEE 1394 (IP over 1394) | SmartDeviceMonitor for Client port Standard TCP/IP |

❖ **Windows NT 4.0**

| Connection Method | Available Ports |
|--------------------------|--|
| Ethernet/ IEEE 802.11b | SmartDeviceMonitor for Client port LPR port |
| IEEE 1394 (IP over 1394) | None |

📖 **Reference**

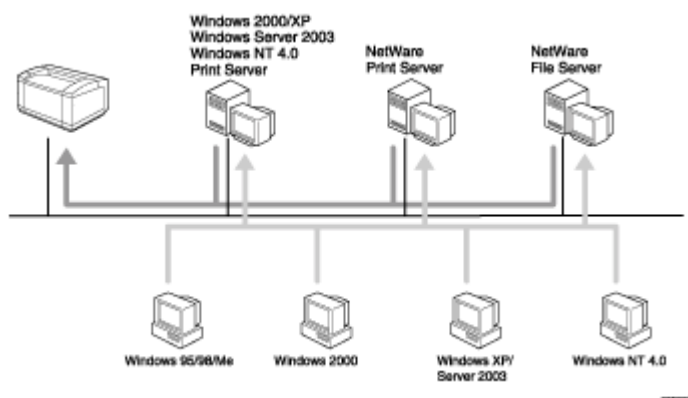
See the explanation of how to install the printer driver for each type of port. For the SmartDeviceMonitor for Client port, see [p.15 “Using the SmartDevice-Monitor for Client Port”](#).

For the Standard TCP/IP port, see [p.32 “Using the Standard TCP/IP Port”](#).

For the LPR port, see [p.37 “Using the LPR Port”](#).

Using as a network printer

This printer can be used as the Windows network printer, the NetWare print server, or the NetWare remote printer.



Reference

See the explanation of how to install the printer driver for each type of network printer.

For the Windows network printer, see [p.42 “Using as the Windows Network Printer”](#).

For the NetWare print server and remote printer, see [p.49 “Using as the NetWare Print Server/Remote Printer”](#).

Local Connection

Local connections can be established via parallel, USB, IEEE 1394 (SCSI print), and Bluetooth connections.

Windows operating system version determines the available connection methods.

- Windows 95:
 - Parallel connection
- Windows 98:
 - Parallel connection
- Windows 98 SE/Me:
 - USB, Parallel, and Bluetooth connections
- Windows 2000:
 - USB, Parallel, IEEE 1394 (SCSI print), and Bluetooth connections
- Windows XP:
 - USB, Parallel, IEEE 1394 (SCSI print), and Bluetooth connections
- Windows Server 2003:

- USB, Parallel, IEEE 1394 (SCSI print), and Bluetooth connections
- Windows NT 4.0:
 - Parallel connection

Reference

See the explanation of how to install the printer driver for each method of connection.

For the USB connection, see [p.52 “Installing the Printer Driver Using USB”](#).

For the parallel connection, see [p.58 “Printing with Parallel Connection”](#).

For the IEEE 1394 (SCSI print) connection, see [p.63 “Installing the Printer Driver Using IEEE 1394 \(SCSI print\)”](#).

For the Bluetooth connection, see [p.67 “Printing with Bluetooth Connection”](#).

Using the SmartDeviceMonitor for Client Port

Installing SmartDeviceMonitor for Client

★ Important

- ❑ To install SmartDeviceMonitor for Client under Windows 2000/XP Professional, Windows Server 2003, and Windows NT 4.0, you must have an account that has Manage Printers permission. Log on as an Administrator.
- ❑ Install SmartDeviceMonitor for Client before installing the printer driver when using the SmartDeviceMonitor for Client port.

1 Quit all applications currently running.

2 Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch “Setup.exe” on the CD-ROM root directory.

3 Select an interface language, and then click [OK].

The default interface language is English.

4 Click [SmartDeviceMonitor for Client / Admin].

5 The SmartDeviceMonitor for Client installer starts.

6 Click [SmartDeviceMonitor for Client], and then click [Next >].

The SmartDeviceMonitor for Client installer starts.

7 The software license agreement appears in the [License Agreement] dialog box. After reading through its contents, click [Yes] to accept it.

8 Follow the instructions on the display to install SmartDeviceMonitor for Client.

9 Click [OK].

If you are required to restart the computer after installing SmartDeviceMonitor for Client, restart the computer.

↓ Note

- ❑ To stop installation of the selected software, click [Cancel] before installation is complete.

- ☐ SmartDeviceMonitor for Client supports following languages: Czech, Danish, German, English, Spanish, French, Italian, Hungarian, Dutch, Norwegian, Polish, Portuguese, Finnish, Swedish, Chinese Simple and Chinese Traditional.

Installing the PCL or RPCS Printer Driver (TCP/IP)

★ Important

- ☐ To install this printer driver under Windows 2000/XP Professional, Windows Server 2003, and Windows NT 4.0, you must have an account that has Manage Printers permission. Log on as an Administrators or Power Users group member.

1 Quit all applications currently running.

2 Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.

3 Select an interface language, and then click [OK].

The default interface language is English.

4 Click [PCL/RPCS Printer Drivers].

5 The software license agreement appears in the [License Agreement] dialog box.

After reading the agreement, click [I accept the agreement], and then click [Next].

6 Select the printer driver you want to use in the [Printer Program] dialog box.

You can select several printer drivers.

7 Select the printer model you want to use.

The printer name can be changed in the [Change settings for 'Printer Name'] box.

8 Double-click the printer name to display the printer settings.

↓ Note

- ☐ The details shown in [Comment:], [Driver:], and [Port:] vary depending on the operating system, printer model, and port.

9 Click [Port:], and then click [Add].

10 Click [SmartDeviceMonitor], and then click [New Port...].

11 Click [TCP/IP], and then click [Search].

A list of printers using TCP/IP appears.

12 Select the printer you want to use, and then click [OK].

Only printers that respond to a broadcast from the computer appear. To use a printer not listed here, click **[Specify Address]**, and then enter the IP address or host name of the printer.

Under Windows 95/98/Me, you cannot add an IP address partially similar to the one already used. For example, if “192.168.0.2” is in use, “192.168.0.2xx” cannot be used. Similarly, if “192.168.0.20” is in use, “192.168.0.2” cannot be used.

13 Check that the port of the selected printer is displayed in [Port:].

14 Set a User Code, if necessary.

This allows a SmartDeviceMonitor for Admin user to display and check statistics about the number of sheets which each user prints. For details, see SmartDeviceMonitor for Admin Help.

Up to 8 numeric characters can be entered. No alphabetic characters or symbols are available.

15 Select the [Default Printer] check box to configure the printer as default.

16 Click [Finish].

Installation starts.

17 Click [Finish] in the installation completion dialog box.

A message about restarting the computer may appear. Restart the computer to complete installation.

 **Reference**

A message appears if there is a newer version of the printer driver already installed. If there is, you cannot install the printer driver using Auto Run. If you still want to install the printer driver, install using **[Add Printer]**. See [p.70 “If a Message Appears during Installation”](#).

Installing the PCL or RPCS Printer Driver (IPP)

 **Important**

- ☐ To install printer driver under Windows 2000/XP Professional, Windows Server 2003, and Windows NT 4.0, you must have an account that has Manage Printers permission. For this, log on as an Administrators or Power Users group member.

1 Quit all applications currently running.

2 Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch “Setup.exe” on the CD-ROM root directory.

3 Select an interface language, and then click [OK].

The default interface language is English.

4 Click [PCL/RPCS Printer Drivers].

5 The software license agreement appears in the [License Agreement] dialog box.

After reading the agreement, click [I accept the agreement], and then click [Next].

6 Select a printer driver you want to use in the [Printer Program] dialog box.

You can select several printer drivers.

7 Select the printer model you want to use.

The printer name can be changed in the [Change settings for 'Printer Name'] box.

8 Double-click the printer name to display the printer settings.



☐ The details shown in [Comment:], [Driver:], and [Port:] vary depending on the operating system, printer model, and port.

9 Click [Port:], and then click [Add].

10 Click [SmartDeviceMonitor], and then click [New Port...].

11 Click [IPP].

12 In the [Printer URL] box, enter “http://printer's address/printer” as the printer's address.

If the server authentication is issued, to enable SSL(a protocol for encrypted communication), enter “https://printer's address/printer” (Internet Explorer 5.01, or a higher version must be installed).

(example IP address: 192.168.15.16)

http://192.168.15.16/printer

https://192.168.15.16/printer

You can enter “http://printer's address/ipp” as the printer's address.

13 Enter a name for identifying the printer in [IPP Port Name]. Use a name different from the one of any existing port.

If a name is not specified here, the address entered in the [Printer URL] box becomes the IPP port name.

14 Click [Detailed Settings] to make necessary settings.

For information about the settings, see SmartDeviceMonitor for Client Help.

15 Check that the port of the selected printer is displayed in [Port:].

16 Set a User Code, if necessary.

This allows a SmartDeviceMonitor for Admin user to display and check the number of sheets each user prints. For details, see SmartDeviceMonitor for Admin Help.

Up to 8 numeric characters can be entered. No alphabetic characters or symbols can be entered.

17 Select the [Default Printer] check box to configure the printer as default.

18 Click [Finish].

Installation starts.

19 Click [Finish] in the installation completion dialog box.

A message about restarting the computer may appear. Restart the computer to complete installation.



☐ To stop installation of the selected software, click **[Cancel]** before installation is complete.



A message appears if there is a newer version of the printer driver already installed. If there is, you cannot install the printer driver using Auto Run. If you still want to install the printer driver, use **[Add Printer]**. See [p.70 "If a Message Appears during Installation"](#).

Installing the PostScript 3 Printer Driver (Windows 95/98/Me - TCP/IP)

1 Quit all applications currently running.

2 Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.

3 Select an interface language, and then click [OK].

The default interface language is English.



- ☐ The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Cestina, Magyar, Polski, Portugues, Suomi.

4 Click [PostScript 3 Printer Driver].

Add Printer Wizard starts.

5 Click [Next].

6 Click [Local Printer], and then click [Next].

A dialog box for selecting the printer manufacturer and model name appears.

7 Select the name of the printer whose driver you want to install, and then click [Next].

8 In the [Available ports:] box, click [Printer Port], and then click [Next].

9 Change the printer name if you want, and then click [Next].

Select the [Yes] check box to configure the printer as default.

10 Specify whether or not to print a test page, and then click [Finish].

11 On the [Start] menu, point to [Settings], and then click [Printers].

The [Printers] window appears.

12 Click the icon of the printer you want to use. On the [File] menu, click [Properties].

13 On the [Details] tab, click [Add Port...].

14 Click [SmartDeviceMonitor] in the [Other] list, and then click [OK].

15 Click [TCP/IP], and then click [Search].

A list of printers using TCP/IP appears.

16 Select the printer you want to use, and then click [OK].

Only printers that respond to a broadcast from the computer appear. To use a printer not listed here, click [Specify Address], and then enter the IP address or host name of the printer.

You cannot add an IP address partially similar to the one already used. For example, if “192.168.0.2” is in use, “192.168.0.2xx” cannot be used. Similarly, if “192.168.0.20” is in use, “192.168.0.2” cannot be used.

17 Click [OK].

18 Check that the selected port is highlighted in [Printer to the following port], and then click [OK].

19 Restart the computer to complete installation.



- ☐ A User Code can be set after the printer driver installation. For information about User Code, see the printer driver Help.

Installing the PostScript 3 Printer Driver (Windows 95/98/Me - IPP)

1 Quit all applications currently running.

2 Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch “Setup.exe” on the CD-ROM root directory.

3 Select an interface language, and then click [OK].

The default interface language is English.



- ☐ The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Cestina, Magyar, Polski, Portugues, Suomi.

4 Click [PostScript 3 Printer Driver].

Add Printer Wizard starts.

5 Click [Next].

6 Click [Local Printer], and then click [Next].

A dialog box for selecting the printer manufacturer and model name appears.

7 Select the name of the printer whose driver you want to install, and then click [Next].

8 In the [Available ports:] box, click [Printer Port], and then click [Next].

9 Change the printer name if you want, and then click [Next].

Select the [Yes] check box to configure the printer as default.

10 Specify whether or not to print a test page, and then click [Finish].

11 On the [Start] menu, point to [Settings], and then click [Printers].

The [Printers] window appears.

12 Click the icon of the printer you want to use. On the [File] menu, click [Properties].

13 On the [Details] tab, click [Add Port...].

14 Click [SmartDeviceMonitor] in the [Other] list, and then click [OK].

15 Click [IPP].

16 In the [Printer URL] box, enter “http://(printer's address)/printer” as the printer's address.

If the server authentication is issued, to enable SSL (a protocol for encrypted communication), enter “https://(printer's address)/printer” (Internet Explorer 5.01, or a higher version must be installed).

(example IP address: 192.168.15.16)

http://192.168.15.16/printer

https://192.168.15.16/printer

You can enter “http://(printer's address)/ipp” as the printer's address.

17 Enter a name for identifying the printer in [IPP Port Name]. Use a name different from the one of any existing port.

If a name is not specified here, the address entered in the [Printer URL] box becomes the IPP port name.

18 Click [Detailed Settings] to configure proxy server, IPP user name, and other settings. Make these settings, and then click [OK]. For details, see Help on the CD-ROM.

 Note

☐ For information about the settings, see SmartDeviceMonitor for Client Help.

19 Click [OK].

20 Check that the selected port is highlighted in [Printer to the following port], and then click [OK].

21 Restart the computer to complete installation.

 Note

☐ A User Code can be set after the printer driver installation. For information about User Code, see the printer driver Help.

Installing the PostScript 3 Printer Driver (Windows 2000 - TCP/IP)

 Important

☐ Installing this printer driver requires Administrators permission. Log on using an account that has Administrators permission.

1 Quit all applications currently running.

2 Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch “Setup.exe” on the CD-ROM root directory.

3 Select an interface language, and then click [OK].

The default interface language is English.



- ☐ The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Cestina, Magyar, Polski, Portugues, Suomi.

4 Click [PostScript 3 Printer Driver].

Add Printer Wizard starts.

5 Click [next >].

6 Click [Local printer], and then click [next >].

7 Click [Add Port...].

8 Click [SmartDeviceMonitor], and then click [Next >].

9 Click [TCP/IP], and then click [Search].

A list of printers using TCP/IP appears.

10 Select the printer you want to use, and then click [OK].

Only printers that respond to a broadcast from the computer appear. To use a printer not listed here, click [Specify Address], and then enter the IP address or host name of the printer.

11 Check that the name of the printer whose driver you want to install is selected, and then click [Next >].

12 Change the printer name if you want, and then click [Next >].

Select the [Yes] check box to configure the printer as default.

13 Click [Next >].

14 Specify whether or not to print a test page, and then click [Next>].

15 Click [Finish].

The printer driver installation starts.



- ☐ A User Code can be set after the printer driver installation. For information about User Code, see the printer driver Help.

Installing the PostScript 3 Printer Driver (Windows 2000 - IPP)

★ Important

- ❑ Installing this printer driver requires Administrators permission. Log on using an account that has Administrators permission.

1 Quit all applications currently running.

2 Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch “Setup.exe” on the CD-ROM root directory.

3 Select an interface language, and then click [OK].

The default interface language is English.



- ❑ The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Cestina, Magyar, Polski, Portugues, Suomi.

4 Click [PostScript 3 Printer Driver].

Add Printer Wizard starts.

5 Click [Next >].

6 Click [Local printer], and then click [Next >].

7 Click [Add Port...].

8 Click [SmartDeviceMonitor], and then click [Next >].

9 Click [IPP].

10 In the [Printer URL] box, enter “http://(printer's address)/printer” as the printer's address.

If the server authentication is issued, to enable SSL (a protocol for encrypted communication), enter “https://(printer's address)/printer” (Internet Explorer 5.01, or a higher version must be installed).

(example IP address: 192.168.15.16)

http://192.168.15.16/printer

https://192.168.15.16/printer

You can enter “http://(printer's address)/ipp” as the printer's address.

11 Enter a name for identifying the printer in [IPP Port Name]. Use a name different from the name of any existing port.

If a name is not specified here, the address entered in the **[Printer URL]** box becomes the IPP port name.

- 12 Click [Detailed Settings] to configure proxy server, the IPP user name and other settings. Specify the necessary settings, and then click [OK].**

For information about the settings, see SmartDeviceMonitor for Client Help.

- 13 Click [OK].**

- 14 Check that the name of the printer whose driver you want to install is selected, and then click [Next >].**

- 15 Change the printer name if you want, and then click [Next >].**

- 16 Click [Next >].**

- 17 Specify whether or not to print a test page, and then click [Next >].**

- 18 Click [Finish].**

The printer driver installation starts.



- ☐ A User Code can be set after the printer driver installation. For information about User Code, see the printer driver Help.

Installing the PostScript 3 Printer Driver (Windows XP, Windows Server 2003 - TCP/IP)



- ☐ Installing this printer driver requires Administrators permission. Log on using an account that has Administrators permission.

- 1 Quit all applications currently running.**

- 2 Insert the CD-ROM into the CD-ROM drive.**

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.

- 3 Select an interface language, and then click [OK].**

The default interface language is English.



- ☐ The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Cestina, Magyar, Polski, Portugues, Suomi.

- 4 Click [PostScript 3 Printer Driver].**

Add Printer Wizard starts.

5 Click [Next >].

6 Click [Local printer], and then click [Next >].

7 Click [Create a new port:].

8 Click [SmartDeviceMonitor], and then click [Next >].

9 Click [TCP/IP], and then click [Search].

A list of printers using [TCP/IP] appears.

10 Select the printer you want to use, and then click [OK].

Only printers that respond to a broadcast from the computer appear. To use a printer not listed here, click [Specify Address], and then enter the IP address or host name of the printer.

11 Check that the name of the printer whose driver you want to install is selected, and then click [Next >].

12 Change the printer name if you want, and then click [Next >].

Select the [Yes] check box to configure the printer as default.

13 Click [Next >].

14 Specify whether or not to print a test page, and then click [Next >].

15 Click [Finish].

The printer driver installation starts.



- ☐ A User Code can be set after the printer driver installation. For information about User Code, see the printer driver Help.

Installing the PostScript 3 Printer Driver (Windows XP, Windows Server 2003 - IPP)



- ☐ Installing this printer driver requires Administrators permission. Log on using an account that has Administrators permission.

1 Quit all applications currently running.

2 Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.

3 Select an interface language, and then click [OK].

The default interface language is English.



- ☐ The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Cestina, Magyar, Polski, Portugues, Suomi.

4 Click [PostScript 3 Printer Driver].

Add Printer Wizard starts.

5 Click [Next >].

6 Click [Local printer], and then click [Next >].

7 Click [Create a new port:].

8 Click [SmartDeviceMonitor], and then click [Next >].

9 Click [IPP].

10 In the [Printer URL] box, enter “http://(printer's address)/printer” as the printer's address.

If the server authentication is issued, to enable SSL (a protocol for encrypted communication), enter “https://(printer's address)/printer” (Internet Explorer 5.01, or a higher version must be installed).

(example IP address: 192.168.15.16)

http://192.168.15.16/printer

https://192.168.15.16/printer

You can enter “http://(printer's address)/ipp” as the printer's address.

11 Enter a name for identifying the printer in [IPP Port Name]. Use a name different from the one of any existing port.

If a name is not specified here, the address entered in the [Printer URL] box becomes the IPP port name.

12 Click [Detailed Settings] to make necessary settings.

For information about the settings, see SmartDeviceMonitor for Client Help.

13 Click [OK].

14 Check that the name of the printer driver you want to install is selected, and then click [Next >].

15 Change the name of the printer if you want, and then click [Next >].

Select the [Yes] check box to configure the printer as default.

16 Click [Next >].

17 Specify whether or not to print a test page, and then click [Next >].

18 Click [Finish].

The printer driver installation starts.



- ☐ A User Code can be set after the printer driver installation. For information about User Code, see the printer driver Help.

Installing the PostScript 3 Printer Driver (Windows NT 4.0 - TCP/IP)



- ☐ Installing this printer driver requires Administrators permission. Log on using an account that has Administrators permission.

1 Quit all applications currently running.

2 Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.

3 Select an interface language, and then click [OK].

The default interface language is English.



- ☐ The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Cestina, Magyar, Polski, Portugues, Suomi.

4 Click [PostScript 3 Printer Driver].

Add Printer Wizard starts.

5 Click [Next].

6 Click [Add Port:].

7 Click [SmartDeviceMonitor], and then click [New Port...].

8 Click [TCP/IP], and then click [Search].

A list of printers using [TCP/IP] appears.

9 Select the printer you want to use, and then click [OK].

Only printers that respond to a broadcast from the computer appear. To use a printer not listed here, click **[Specify Address]**, and then enter the IP address or host name of the printer.

10 Check that the name of the printer whose driver you want to install is selected, and then click [Next >].

11 Change the printer name if you want, and then click [Next >].

Select the **[Yes]** check box to configure the printer as default.

12 Specify whether or not to print a test page, and then click [Finish].

The printer driver installation starts.

13 Restart the computer to complete installation.



- ☐ A User Code can be set after the printer driver installation . For information about User Code, see the printer driver Help.

Installing the PostScript 3 Printer Driver (Windows NT 4.0 - IPP)



- ☐ Installing this printer driver requires Administrators permission. Log on using an account that has Administrators permission.

1 Quit all applications currently running.

2 Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch “Setup.exe” on the CD-ROM root directory.

3 Select an interface language, and then click [OK].

The default interface language is English.



- ☐ The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Cestina, Magyar, Polski, Portugues, Suomi.

4 Click [PostScript 3 Printer Driver].

Add Printer Wizard starts.

5 Click [Next].

6 Click [Add Port:].

7 Click [SmartDeviceMonitor], and then click [New Port...].

8 Click [IPP].

9 In the [Printer URL] box, enter “http://(printer's address)/printer” as the printer's address.

If the server authentication is issued, to enable SSL (a protocol for encrypted communication), enter “https://(printer's address)/printer” (Internet Explorer 5.01, or a higher version must be installed).

(example IP address: 192.168.15.16)

http://192.168.15.16/printer

https://192.168.15.16/printer

You can enter “http://(printer's address)/ipp” as the printer's address.

10 Enter a name for identifying the printer in [IPP Port Name]. Use a name different from the one of any existing port.

If a name is not specified here, the address entered in the [Printer URL] box becomes the IPP port name.

11 Click [Detailed Settings] to make necessary settings.

For information about the settings, see SmartDeviceMonitor for Client Help.

12 Click [OK].

13 Check that the name of the printer whose driver you want to install is selected, and then click [Next >].

14 Change the printer name if you want, and then click [Next >].

Select the [Yes] check box to configure the printer as default.

15 Specify whether or not to print a test page, and then click [Finish].

The printer driver installation starts.

16 Restart the computer to complete installation.



- ☐ A User Code can be set after the printer driver installation. For information about User Code, see the printer driver Help.

Changing the Port Settings for SmartDeviceMonitor for Client

Follow the procedure below to change the SmartDeviceMonitor for Client settings, such as TCP/IP timeout, recovery/parallel printing, and printer groups.

Windows 95/98:

1 Open [Printers] window from [Start] menu.

2 In the [Printers] window, click the icon of the printer you want to use. On the [File] menu, click [Properties].

3 Click the [Details] tab, and then click [Configure Port].

The [Port Settings] dialog box appears.

Windows 2000 / Windows NT 4.0:

1 Open [Printers] window from [Start] menu.

2 In the [Printers] window, click the icon of the printer you want to use. On the [File] menu, click [Properties].

3 On the [Ports] tab, click [Configure Port].

The [Port Settings] dialog box appears.

Windows XP, Windows Server 2003:

1 On the [Start] menu, point to [Settings], and then click [Printers].

2 In the [Printers] window, click the icon of the printer you want to use. On the [File] menu, click [Properties].

3 Click the [Details] tab, and then click [Configure Port].

The [Port Settings] dialog box appears.

- For TCP/IP, timeout setting can be configured.



- ☐ If no settings on the [Recovery/Parallel Printing] tab are available, follow the procedure below.

- ① Click [Cancel] to close the [Port Configuration:] dialog box.
- ② Start SmartDeviceMonitor for Client, and then right-click the SmartDeviceMonitor for Client icon on the taskbar.
- ③ Click [Extended Features Settings], and then select the [Set Recovery/Parallel Printing for each port] check box.
- ④ Click [OK] to close the [Extended Features Settings] dialog box.

- User, proxy, and timeout settings can be configured for IPP.



For information about these settings, see SmartDeviceMonitor for Client Help.

Using the Standard TCP/IP Port

Installing the PCL or RPCS Printer Driver

★ Important

- ❑ To install printer driver under Windows 2000/XP Professional, and Windows Server 2003, you must have an account that has Manage Printers permission. Log on as an Administrators or Power Users group member.

1 Quit all applications currently running.

2 Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.

3 Select an interface language, and then click [OK].

The default interface language is English.

4 Click [PCL/RPCS Printer Drivers].

5 The software license agreement appears in the [License Agreement] dialog box.

After reading the agreement, click [I accept the agreement], and then click [Next].

6 Select a printer driver you want to use in the [Printer Program] dialog box.

You can select several printer drivers.

7 Select the printer model you want to use.

The printer name can be changed in the [Change settings for 'Printer Name'] box.

8 Double-click the printer name to display the printer settings.



- ❑ The details shown in [Comment:], [Driver:], and [Port:] vary depending on the operating system, printer model, and port.

9 Click [Port:], and then click [Add].

10 Click [Standard TCP/IP], and then click [New Port...].

Configure the Standard TCP/IP port settings, and then see Windows Help if [Standard TCP/IP Port] does not appear.

11 Click [Next] in the [Add Standard TCP/IP Printer Port Wizard] dialog box.

12 Enter the printer name or IP address in the [Printer Name or IP Address] box.

The **[Port Name]** text box automatically obtains a port name. Change this name if necessary.

When screen for Device selection appears, select “RICOH NetworkPrinter Driver C Model”.

13 Click [Finish] in the [Add Standard TCP/IP Printer Port Wizard] dialog box.

The installation start dialog box reappears.

14 Check that the port of the selected printer is displayed in [Port:].

15 Configure the default printer as necessary.

16 Click [Finish].

The printer driver installation starts.

17 Click [Finish] in the installation completion dialog box.

A message about restarting the computer may appear. Restart the computer to complete installation.



- ☐ To stop installation of the selected software, click **[Cancel]** before installation is complete.



A message appears if there is a newer version of the printer driver already installed. If there is, you cannot install the printer driver using Auto Run. If you still want to install the printer driver, use **[Add Printer]**. See [p.70 “If a Message Appears during Installation”](#).

Installing the PostScript 3 Printer Driver (Windows 2000)



- ☐ Installing this printer driver requires Administrators permission. Log on using an account that has Administrators permission.

1 Quit all applications currently running.

2 Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch “Setup.exe” on the CD-ROM root directory.

3 Select an interface language, and then click [OK].

The default interface language is English.



- ☐ The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Cestina, Magyar, Polski, Portugues, Suomi.

4 Click [PostScript 3 Printer Driver].

Add Printer Wizard starts.

5 Click [Next >].

6 Click [Local printer], and then click [Next >].

7 Click [Add Port...].

8 Click [Standard TCP/IP], and then click [New Port...].

9 Click [Next] in the [Add Standard TCP/IP Printer Port Wizard] dialog box.

10 Enter the printer name or IP address in the [Printer Name or IP Address] box, and then click [Next >].

When screen for Device selection appears, select “RICOH NetworkPrinter Driver C Model”.

11 Click [Finish] in the [Add Standard TCP/IP Printer Port Wizard] dialog box.

12 Check that the name of the printer whose driver you want to install is selected, and then click [Next >].

13 Change the printer name if you want, and then click [Next >].

Select the [Yes] check box to configure the printer as default.

14 Click [Next >].

15 Specify whether or not to print a test page, and then click [Next>].

16 Click [Finish].

The printer driver installation starts.



- ☐ A User Code can be set after the printer driver installation . For information about User Code, see the printer driver Help.

Installing the PostScript 3 Printer Driver (Windows XP, Windows Server 2003)



- ☐ Installing this printer driver requires Administrators permission. Log on using an account that has Administrators permission.

1 Quit all applications currently running.

2 Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch “Setup.exe” on the CD-ROM root directory.

3 Select an interface language, and then click [OK].

The default interface language is English.



- ☐ The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Cestina, Magyar, Polski, Portugues, Suomi.

4 Click [PostScript 3 Printer Driver].

Add Printer Wizard starts.

5 Click [Next >].

6 Click [Local printer], and then click [Next >].

7 Click [Create a new port:].

8 Click [Standard TCP/IP] in [Create a new Port], and then click [Next].

9 Click [Standard TCP/IP], and then click [OK].

10 Click [Next] in the [Add Standard TCP/IP Printer Port Wizard] dialog box.

11 Enter the printer name or IP address in the [Printer Name or IP Address] box, and then click [Next >].

When screen for Device selection appears, select “RICOH NetworkPrinter Driver C Model”.

12 Click [Finish] in the [Add Standard TCP/IP Printer Port Wizard] dialog box.

13 Check that the name of the printer whose driver you want to install is selected, and then click [Next >].

14 Change the printer name if you want, and then click [Next >].

Select the [Yes] check box to configure the printer as default.

15 Click [Next >].

16 Specify whether or not to print a test page, and then click [Next >].

17 Click [Finish].

The printer driver installation starts.



- ☐ A User Code can be set after the printer driver installation. For information about User Code, see the printer driver Help.

Using the LPR Port

Installing the PCL or RPCS Printer Driver

★ Important

- ❑ To install this printer driver under Windows 2000/XP Professional, Windows Server 2003, and Windows NT 4.0, you must have an account that has Manage Printers permission. Log on as an Administrators or Power Users group member.

1 Quit all applications currently running.

2 Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch “Setup.exe” on the CD-ROM root directory.

3 Select an interface language, and then click [OK].

The default interface language is English.

4 Click [PCL/RPCS Printer Drivers].

5 The software license agreement appears in the [License Agreement] dialog box.

After reading the agreement, click [I accept the agreement], and then click [Next].

6 Select a printer driver you want to use in the [Printer Program] dialog box.

You can select several printer drivers.

7 Select the printer model you want to use.

The printer name can be changed in the [Change settings for 'Printer Name'] box.

8 Double-click the printer name to display the printer settings.

↓ Note

- ❑ The details shown in [Comment:], [Driver:], and [Port:] vary depending on the operating system, printer model, and port.

9 Click [Port:], and then click [Add].

10 Click [LPR Port], and then click [New Port...].

If [LPR Port] does not appear, see Windows Help and install it.

11 Enter the printer's IP address in the [Name or address of server providing lpd] box.

- 12** Enter “lp” in the [Name of printer or print queue on that server] box, and then click [OK].

The port is added.

- 13** Check that the port of the selected printer is displayed in [Port:].

- 14** Configure the default printer as necessary.

- 15** Click [Finish].

The printer driver installation starts.

- 16** Click [Finish] in the installation completion dialog box.

A message about restarting the computer may appear. Restart the computer to complete installation.

Reference

A message appears if there is a newer version of the printer driver already installed. If there is, you cannot install the printer driver using Auto Run. If you still want to install the printer driver, use [Add Printer]. See [p.70 “If a Message Appears during Installation”](#).

Installing the PostScript 3 Printer Driver (Windows 2000)

Important

- ☐ Installing this printer driver requires Administrators permission. Log on using an account that has Administrators permission.

- 1** Quit all applications currently running.

- 2** Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch “Setup.exe” on the CD-ROM root directory.

- 3** Select an interface language, and then click [OK].

The default interface language is English.

Note

- ☐ The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Cestina, Magyar, Polski, Portugues, Suomi.

- 4** Click [PostScript 3 Printer Driver].

Add Printer Wizard starts.

- 5** Click [Next >].

- 6** Click [Local printer], and then click [Next >].
- 7** Click [Add Port...].
- 8** Click [LPR Port], and then click [New Port...].
- 9** Enter the printer's IP address in the [Name or address of server providing lpd] box.
- 10** Enter “lp” in the [Name of printer or print queue on that server] box, and then click [OK].
- 11** Check that the name of the printer whose driver you want to install is selected, and then click [Next >].
- 12** Change the printer name if you want, and then click [Next >].
Select the [Yes] check box to configure the printer as default.
- 13** Click [Next >].
- 14** Specify whether or not to print a test page, and then click [Next >].
- 15** Click [Finish].

The printer driver installation starts.



- ☐ A User Code can be set after the printer driver installation. For information about User Code, see the printer driver Help.

Installing the PostScript 3 Printer Driver (Windows XP, Windows Server 2003)



- ☐ Installing this printer driver requires Administrators permission. Log on using an account that has Administrators permission.
- 1** Quit all applications currently running.
 - 2** Insert the CD-ROM into the CD-ROM drive.
The installer starts.
Auto Run may not work with certain operating system settings. If this happens, launch “Setup.exe” on the CD-ROM root directory.
 - 3** Select an interface language, and then click [OK].
The default interface language is English.



- ☐ The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Cestina, Magyar, Polski, Portugues, Suomi.

4 Click [PostScript 3 Printer Driver].

Add Printer Wizard starts.

5 Click [Next >].

6 Click [Local Printer], and then click [Next >].

7 Click [Create a new port:].

8 Click [LPR Port] in [Create a new Port], and then click [Next >].

9 Enter the printer's IP address in the [Name or address of server providing lpd] box.

10 Enter "lp" in the [Name of printer or print queue on that server box], and then click [OK].

11 Check that the name of the printer whose driver you want to install is selected, and then click [Next >].

12 Change the printer name if you want, and then click [Next >].

Select the [Yes] check box to configure the printer as default.

13 Click [Next >].

14 Specify whether or not to print a test page, and then click [Next >].

15 Click [Finish].

The printer driver installation starts.



- ☐ A User Code can be set after the printer driver installation. For information about User Code, see the printer driver Help.

Installing the PostScript 3 Printer Driver (Windows NT 4.0)



- ☐ Installing this printer driver requires Administrators permission. Log on using an account that has Administrators permission.

1 Quit all applications currently running.

2 Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch “Setup.exe” on the CD-ROM root directory.

3 Select an interface language, and then click [OK].

The default interface language is English.



- ☐ The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Cestina, Magyar, Polski, Portugues, Suomi.

4 Click [PostScript 3 Printer Driver].

Add Printer Wizard starts.

5 Click [Next].

6 Click [Add Port:].

7 Select [LPR Port], and then click [OK].

8 Enter the printer's IP address in the [Name or address of server providing lpd box] box.

9 Enter “lp” in the [Name of printer or print queue on that server] box, and then click [OK].

10 Check that the name of the printer whose driver you want to install is selected, and then click [Next >].

11 Change the printer name if you want, and then click [Next >].

Select the [Yes] check box to configure the printer as default.

12 Specify whether or not to print a test page, and then click [Finish].

The printer driver installation starts.

13 Restart the computer to complete installation.



- ☐ A User Code can be set after the printer driver installation. For information about User Code, see the printer driver Help.

Using as the Windows Network Printer

Installing the PCL or RPCS Printer Driver

To use the print server, install the printer driver by selecting “Network printer server”, and then select the Windows 2000/XP, Windows Server 2003, or Windows NT 4.0 shared printer.

This section assumes that the client has already been configured to communicate with a Windows 2000/XP, Windows Server 2003, or Windows NT 4.0 print server. Do not begin the following procedure before the client is set up and configured correctly.

★ Important

- ❑ To install printer driver under Windows 2000/XP Professional, Windows Server 2003, and Windows NT 4.0, you must have an account that has Manage Printers permission. For this, log on as an Administrators or Power Users group member.
- ❑ If you print with a print server connected to the printer using the SmartDevice-Monitor port, Recovery Printing and Parallel Printing cannot be used from the client.
- ❑ If you print with a Windows XP or Windows Server 2003 print server, notification functions of SmartDeviceMonitor may not be used with the client.
- ❑ If you print with a Windows NT 4.0 print server, install the printer driver before you connect the print server to the printer.

1 Quit all applications currently running.

2 Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch “Setup.exe” on the CD-ROM root directory.

3 Select an interface language, and then click [OK].

The default interface language is English.

4 Click [PCL/RPCS Printer Drivers].

5 The software license agreement appears in the [License Agreement] dialog box.

After reading the agreement, click [I accept the agreement], and then click [Next].

6 Select a printer driver you want to use in the [Printer Program] dialog box.

You can select several printer drivers.

- 7** Select the [Printer Name] check box to select the printer models you want to use.

The printer name can be changed in the [Change settings for 'Printer Name'] box.

- 8** Double-click the printer name to display the printer settings.

The details shown in [Comment:], [Driver:], and [Port:] vary depending on the operating system, printer model, and port.

- 9** Click [Port:], and then click [Add].

- 10** Click [Network Printer], and then click [OK].

- 11** Double-click the computer name you want to use as a print server in the [Browse for Printer] window.

- 12** Select the printer you want to use, and then click [OK].

- 13** Check that the port of the selected printer is displayed in [Port:].

- 14** Configure the User Code as necessary.

For an RPCS printer driver, a User Code can be set after the printer driver installation. For information about User Code, see the printer driver Help.

- 15** Select the [Default Printer] check box to configure the printer as default.

- 16** Click [Finish].

The printer driver installation starts.

- 17** Click [Finish] in the installation completion dialog box.

A message about restarting the computer may appear. Restart the computer to complete installation.

Reference

A message appears if there is a newer version of the printer driver already installed. If there is, you cannot install the printer driver using Auto Run. If you still want to install the printer driver, use [Add Printer]. See [p.70 "If a Message Appears during Installation"](#).

Installing the PostScript 3 Printer Driver (Windows 95/98/Me)

Important

- ☐ If you print from a print server connected to the printer using the SmartDevice-Monitor port, the client cannot use Recovery Printing and Parallel Printing.

- 1** Quit all applications currently running.

- 2** Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch “Setup.exe” on the CD-ROM root directory.

3 Select an interface language, and then click [OK].

The default interface language is English.



- ☐ The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Cestina, Magyar, Polski, Portugues, Suomi.

4 Click [PostScript 3 Printer Driver].

Add Printer Wizard starts.

5 Click [Next].

6 Click [Network Printer], and then click [Next].

7 Click [Browse].

8 Double-click the computer name you want to use as a print server in the [Browse for Printer] window.

9 Select the printer you want to use, and then click [OK].

10 Check the location of the selected printer is shown, and then click [Next].

11 Change the printer name if you want, and then click [Next].

Select the [Yes] check box to configure the printer as default.

12 Specify whether or not to print a test page, and then click [Finish].

13 Restart the computer.



- ☐ A User Code can be set after the printer driver installation. For information about User Code, see the printer driver Help.

Installing the PostScript 3 Printer Driver (Windows 2000)



- ☐ Installing a printer driver requires Administrators permission. Log on using an account that has Administrators permission.
- ☐ If you print from a print server connected to the printer using the SmartDevice-Monitor port, the client cannot use Recovery Printing and Parallel Printing.

1 Quit all applications currently running.

2 Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch “Setup.exe” on the CD-ROM root directory.

3 Select an interface language, and then click [OK].

The default interface language is English.



- ☐ The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Cestina, Magyar, Polski, Portugues, Suomi.

4 Click [PostScript 3 Printer Driver].

Add Printer Wizard starts.

5 Click [Next].

6 Click [Network printer], and then click [Next].

7 Click [Next].

8 Double-click the computer name you want to use as a print server in the [Shared printers] window.

9 Select the printer you want to use, and then click [Next].

10 The printer driver installation starts.

11 Click [Next >].

Select the [Yes] check box to configure the printer as default.

12 Click [Finish].

Restart the computer to complete installation.



- ☐ A User Code can be set after the printer driver installation. For information about User Code, see the printer driver Help.

Installing the PostScript 3 Printer Driver (Windows XP, Windows Server 2003)



- ☐ Installing this printer driver requires Administrators permission. Log on using an account that has Administrators permission.

- ☐ If you print from a print server connected to the printer using the SmartDevice-Monitor port, the client cannot use Recovery Printing and Parallel Printing.
- ☐ If you print with a Windows XP or Windows Server 2003 print server, Smart-DeviceMonitor notification functions may not be possible for the client.

1 Quit all applications currently running.

2 Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.

3 Select an interface language, and then click [OK].

The default interface language is English.



- ☐ The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Cestina, Magyar, Polski, Portugues, Suomi.

4 Click [PostScript 3 Printer Driver].

Add Printer Wizard starts.

5 Click [Next].

6 Click [Network printer] and then click [Next].

7 Click [Next].

8 Double-click the computer name you want to use as a print server in the [Shared printers] window.

9 Select the printer you want to use, and then click [Next].

10 The printer driver installation starts.

11 Click [Next >].

Select the [Yes] check box to configure the printer as default.

12 Click [Finish].

Restart the computer to complete installation.



- ☐ A User Code can be set after the printer driver installation. For information about User Code, see the printer driver Help.

Installing the PostScript 3 Printer Driver (Windows NT 4.0)

★ Important

- ☐ Installing this printer driver requires Administrators permission. Log on using an account that has Administrators permission.
- ☐ If you print from a print server connected to the printer using the SmartDevice-Monitor port, the client cannot use Recovery Printing and Parallel Printing.
- ☐ To print from a Windows NT 4.0 print server, install the printer driver before you connect the print server to the printer.

1 Quit all applications currently running.

2 Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch “Setup.exe” on the CD-ROM root directory.

3 Select an interface language, and then click [OK].

The default interface language is English.



- ☐ The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Cestina, Magyar, Polski, Portugues, Suomi.

4 Click [PostScript 3 Printer Driver].

Add Printer Wizard starts.

5 Click [Next].

6 Click [Network printer], and then click [Next].

7 Click [Next].

8 Double-click the computer name you want to use as a print server in the [Shared printers] window.

9 Select the printer you want to use, and then click [Next].

10 Check the location of the selected printer is shown, and then click [Next].

11 Change the printer name if you want, and then click [Next].

12 Specify whether or not to print a test page, and then click [Finish].

Restart the computer to complete installation.



- ☐ A User Code can be set after the printer driver installation. For information about User Code, see the printer driver Help.

Using as the NetWare Print Server/Remote Printer

This explains how to set up the Windows computer used as the NetWare client.

★ Important

- ❑ To install this printer driver under Windows 2000/XP Professional, Windows Server 2003, and Windows NT 4.0, you must have an account that has Manage Printers permission. Log on as an Administrators or Power Users group member.

The following explanation assumes NetWare Client is installed on the client computer and the NetWare server environment is correctly set up. Install all necessary client applications before following this procedure.

Set up the printer driver while logging on to the NetWare file server.

The following values are used in the example:

- Operating system: Windows 98
- NetWare version: 4.1
- File server name: CAREE
- Queue name: R-QUEUE

1 Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.

2 Select an interface language, and then click [OK].

The default interface language is English.

3 Click [PCL/RPCS Printer Drivers].

4 The software license agreement appears in the [License Agreement] dialog box.

After reading the agreement, click [I accept the agreement], and then click [Next].

5 Select the printer driver you want to use in the [Printer Program] dialog box.

You can select several printer drivers.

6 Select the [Printer Name] check box to select the printer models you want to use.

The printer name can be changed in the [Change settings for 'Printer Name'] box.

7 Double-click the printer name to display the printer settings.

The details shown in **[Comment:]**, **[Driver:]**, and **[Port:]** vary depending on the operating system, printer model, and port.

8 Click [Port:], and then click [Add].

9 Click [Network Printer], and then click [OK].

10 Double-click the name of the NetWare file server on the network tree.

The created queue is displayed.

11 Select the print queue, and then click [OK].

12 Check that the port of the selected printer is displayed in [Port:].

13 Click [Finish].

The printer driver installation starts.

14 Click [Finish] in the [Component selection] dialog box.

15 Click [Finish] in the [Introduction complete] dialog box.

16 In the [Printers] window, open the printer properties.

Under Windows XP or Windows Server 2003, open the printer properties from the **[Printers and Faxes]** window.

17 On the [Printer Settings] tab, clear the [Form Feed] and [Enable Banner] check boxes.

Under Windows 2000/XP, Windows Server 2003, or Windows NT 4.0, click the **[NetWare setting]** tab.

Do not select these check boxes since they are automatically selected by the printer driver. If you select the check boxes, the printer may not print correctly.

18 Click [OK] to close the printer properties dialog box.



- ☐ The protocol is set to inactive as default. Enable it using Web Image Monitor or Telnet

When using the PostScript 3 Printer Driver

Follow the procedure below to set up the PostScript 3 printer driver.

1 In the [Printers] or [Printers and Faxes] window, open the printer properties.

2 Click the [PostScript] tab.



- ☐ When using Windows 2000/XP or Windows NT 4.0, click the **[Device Settings]** tab, and then proceed to step to clear the check box.

3 Click **[Advanced]**.

4 Clear the **[Send CTRL+D before job]** and **[Send CTRL+D after job]** check boxes, and then click **[OK]**.

5 Click **[OK]** to close the printer properties dialog box.

Form Feed

Do not use NetWare to configure form feed. Form feed is controlled by the printer driver on Windows. If NetWare form feed is configured, the printer may not print properly.

Follow the procedure below to disable form feed according to the operating system used:

- Under Windows 95/98/Me, clear the **[Form feed]** check box on the **[Printer Settings]** tab in the printer properties dialog box.
- Under Windows 2000/XP, Windows Server 2003, or Windows NT 4.0, clear the **[Form feed]** check box on the **[NetWare Settings]** tab in the printer properties dialog box.

Banner Page

Do not use NetWare to configure a banner page.

Follow the procedure below to disable banner pages according to the operating system used:

- Under Windows 95/98/Me, clear the **[Enable banner]** check box on the **[Printer Settings]** tab in the printer properties dialog box.
- Under Windows 2000/XP, Windows Server 2003, or Windows NT 4.0, clear the **[Enable banner]** check box on the **[NetWare Settings]** tab in the printer properties dialog box.

Printing after Resetting the Printer

Printer to print server connection requires 30 - 40 seconds to resume after the printer is reset. During this period, jobs may be accepted (depending on NetWare specifications) but not printed.

To print after resetting the printer as the remote printer, check on the print server that the remote printer is disconnected, or wait for two minutes before trying to print.

Installing the Printer Driver Using USB

This section explains how to install printer drivers using USB.

★ Important

- ❑ Make sure that printer is connected to the computer's USB ports using the USB interface cable.

Before installing, check that only the operating system is running on the computer and no print jobs are in progress.

The printer drivers can be installed from the CD-ROM provided with this printer.

Windows 98 SE/Me - USB

★ Important

- ❑ Installation via USB is not possible under Windows 95/98. Upgrade to Windows 98 SE/Me.

If the printer driver has already been installed, plug and play is enabled, and the icon of the printer connected to the “USB” port is added to the **[Printers]** window.

1 Check that the power of the printer is off.

2 Connect the printer and computer using the USB cable.

3 Turn on the power of the printer.

The plug and play function starts and the **[New Hardware Found]**, **[Device Driver Wizard]**, or **[Add New Hardware Wizard]** dialog box appears, depending on the operating system.

4 Click **[Next >]**.

5 Click **[Search for the best driver for your device. {Recommended}.]**, and then click **[Next >]**.

6 Select the **[Specify a location:]** check box, and then click **[Browse...]**.

The **[Browse for Folder]** dialog box appears.

7 Insert the CD-ROM into the CD-ROM drive.

↓ Note

- ❑ When Auto Run starts, click **[Exit]**.
- ❑ To disable Auto Run, press the **[Shift]** key when inserting the CD-ROM into the drive and keep it pressed until the computer finishes reading from the CD-ROM.

8 Specify the location where USB Printing Support is located, and then click **[Next >]**.

If the CD-ROM drive is D, the source files of USB Printing Support are stored in the following location:

D:DRIVESUSBPRINTWIN98ME

9 Check the location, and then click [Next].

USB Printing Support is installed.

10 Click [Finish].

If the printer driver has already been installed, plug and play is enabled, and the icon of the printer connected to the “USB001” port is added to the **[Printers]** window.

11 Click [Next >].

12 Click [Search for the best driver for your device. {Recommended}.], and then click [Next >].

13 Select the [Specify a location:], check box, and then click [Browse...].

The **[Browse for Folder]** dialog box appears.

14 Insert the CD-ROM into the CD-ROM drive.



- ☐ When Auto Run starts, click **[Exit]**.
- ☐ To disable Auto Run, press the **[Shift]** key when inserting the CD-ROM into the drive and keep it pressed until the computer finishes reading from the CD-ROM.

15 Specify the location where the source files of the printer driver is stored, and then click [Next >].

If the CD-ROM drive is D, the source files of the printer driver are stored in the following location:

- RPCS
D:DRIVESRPCSWIN9X_ME(Language)DISK1
- PCL 5c
D:DRIVESPCL5cWIN9X_ME(Language)DISK1
- PCL 6
D:DRIVESPCL6WIN9X_ME(Language)DISK1
- PostScript 3
D:DRIVESPS3WIN98_ME(Language)DISK1

16 Check the location, and then click [Next].

Add Printer Wizard starts.

17 Click [Finish].

Installation is complete. If installation is successful, the icon of the printer connected to the “USB001” port is added to the **[Printers]** window.

↓ Note

- ☐ The number after “USB” varies depending on the number of printers connected.
- ☐ It is not necessary to reinstall USB Printing Support when connecting a different printer via USB interface when USB Printing Support is installed.
- ☐ After installing USB Printing Support, if the printer driver is not installed, follow the plug-and-play instructions of the printer.
- ☐ Install the printer driver from the CD-ROM provided with the printer.

Windows 2000 - USB

★ Important

- ☐ Installing a printer driver requires Administrators permission. Log on using an account that has Administrators permission.

If the printer driver has already been installed, plug and play is enabled, and the icon of the printer connected to the “USB” port is added to the **[Printers]** window.

If the printer driver is not installed, follow the plug-and-play instructions of the printer to install it from the CD-ROM provided.

1 Check that the power of the printer is off.

2 Connect the printer and computer using the USB cable.

3 Turn on the power of the printer.

Found New Hardware Wizard starts, and USB Printing Support is installed automatically.

4 Click [Next] in the [Found New Hardware Wizard] dialog box.

5 Select the [Search for a suitable driver for my device (recommended)] check box, and then click [Next].

6 Select the [Specify location] check box, and then click [Next].

7 Insert the CD-ROM into the CD-ROM drive.

↓ Note

- ☐ When Auto Run starts, click **[Exit]**.
- ☐ To disable Auto Run, press the left **[Shift]** key when inserting the CD-ROM into the drive and keep it pressed until the computer finishes reading from the CD-ROM.

8 Specify the location where the source files of the printer driver is stored.

If the CD-ROM drive is D, the source files of the printer driver are stored in the following location:

- RPCS
D:DRIVESRPCSWIN2K_XP(Language)DISK1
- PCL 5c
D:DRIVESPCL5cWIN2K_XP(Language)DISK1
- PCL 6
D:DRIVESPCL6WIN2K_XP(Language)DISK1
- PostScript 3
D:DRIVESPS3WIN2K_XP(Language)DISK1

9 Check the printer driver location, and then click [OK].

10 Click [Next].

11 Click [Finish].

If the printer driver has already been installed, plug and play is enabled, and the icon of the printer connected to the “USB001” port is added to the **[Printers]** window.



- ☐ The number after “USB” varies depending on the number of printers connected.

Windows XP, Windows Server 2003 - USB

★ Important

- ☐ Installing a printer driver requires Administrators permission. Log on using an account that has Administrators permission.

If the printer driver has already been installed, plug and play is enabled, and the icon of the printer connected to the “USB” port is added to the **[Printers]** window.

The printer drivers can be installed from the CD-ROM provided with this printer.

If the printer driver is not installed, follow the plug-and-play instructions of the printer to install it from the CD-ROM provided.

1 Check that the power of the printer is off.

2 Connect the printer and computer using the USB cable.

3 Turn on the power of the printer.

Found New Hardware Wizard starts, and USB Printing Support is installed automatically.

4 In the Found New Hardware Wizard display, click [Search for a suitable driver for my device [recommended]], and then click [Next >].

- 5** To disable Auto Run, press the left **[Shift]** key when inserting the CD-ROM into the drive and keep it pressed until the computer finishes reading from the CD-ROM.



- ☐ If Auto Run starts, click **[Cancel]**, and then **[Exit]**.

- 6** Select the **[Include this location in the search]** check box under **[Search for the best driver in these location]**, and then click **[Browse]** to select the printer driver location.

If the CD-ROM drive is D, the source files of the printer driver are stored in the following location:

- RPCS
D:DRIVESRPCSWIN2K_XP(Language)DISK1
- PCL 5c
D:DRIVESPCL5cWIN2K_XP(Language)DISK1
- PCL 6
D:DRIVESPCL6WIN2K_XP(Language)DISK1
- PostScript 3
D:DRIVESPS3WIN2K_XP(Language)DISK1

- 7** Check the printer driver location, and then click **[Next]**.

- 8** Click **[Continue]**.

- 9** Click **[Finish]**.


If installation is successful, the icon of the printer connected to the “USB001” port is added to the **[Printers]** window.



- ☐ The number after “USB” varies depending on the number of printers connected.

Troubleshooting USB

| Problem | Solutions |
|--|--|
| The printer is not recognized automatically. | Turn off the power of the printer, reconnect the USB cable, and then turn it on again. |

| | |
|---|--|
| <p>Windows has already configured the USB settings.</p> | <p>Open Windows' Device Manager, and then, under [Universal Serial Bus controllers], remove any conflicting devices. Conflicting devices have a yellow [!] or [?] icon by them. Take care not to accidentally remove required devices. For details, see Windows Help.</p> <p> Note</p> <p><input type="checkbox"/> When using Windows 2000/XP or Windows Server 2003, an erroneous device is displayed under [USB Controller] in the [Device Manager] dialog box.</p> |
|---|--|

Printing with Parallel Connection

To use a printer connected using a parallel interface, click **[LPT1]** when installing the printer driver.

Installing the PCL or RPCS Printer Driver

★ Important

- ❑ To install this printer driver under Windows 2000/XP Professional, Windows Server 2003, and Windows NT 4.0, you must have an account that has Manage Printers permission. Log on as an Administrators or Power Users group member.

1 Quit all applications currently running.

2 Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch “Setup.exe” on the CD-ROM root directory.

3 Select an interface language, and then click **[OK]**.

The default interface language is English.

4 Click **[PCL/RPCS Printer Drivers]**.

5 The software license agreement appears in the **[License Agreement]** dialog box.

After reading the agreement, click **[I accept the agreement]**, and then click **[Next]**.

6 Select a printer driver you want to use in the **[Printer Program]** dialog box.

You can select several printer drivers.

7 Select the **[Printer Name]** check box to select the printer models you want to use.

The printer name can be changed in the **[Change settings for 'Printer Name']** box.

8 Double-click the printer name to display the printer settings.

The details shown in **[Comment:]**, **[Driver:]**, and **[Port:]** vary depending on the operating system, printer model, and port.

9 Check that **[LPT1:]** is shown in **[Port:]**.

10 Select the **[Default Printer]** check box to configure the printer as default.

11 Click **[Finish]**.

The printer driver installation starts.

12 Click [Finish] in the installation completion dialog box.



- ☐ To stop installation of the selected software, click **[Cancel]** before installation is complete. Restart the computer and reinstall other software programs or printer drivers.



A message appears if there is a newer version of the printer driver already installed. If there is, you cannot install the printer driver using Auto Run. If you still want to install the printer driver, use **[Add Printer]**. See [p.70 “If a Message Appears during Installation”](#).

Installing the PostScript 3 Printer Driver (Windows 95/98/Me)

1 Quit all applications currently running.

2 Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch “Setup.exe” on the CD-ROM root directory.

3 Select an interface language, and then click [OK].

The default interface language is English.



- ☐ The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Cestina, Magyar, Polski, Portugues, Suomi.

4 Click [PostScript 3 Printer Driver].

Add Printer Wizard starts.

5 Click [Next].

6 Click [Local Printer], and then click [Next].

A dialog box for selecting the printer manufacturer and model name appears.

7 Select the name of the printer whose driver you want to install, and then click [Next].

8 In the [Available ports:] box, click [Printer Port], and then click [Next].

9 Change the printer name if you want, and then click [Next].

Select the **[Yes]** check box to configure the printer as default.

10 Specify whether or not to print a test page, and then click [Finish].

11 Restart the computer to complete installation.



- ☐ A User Code can be set after the printer driver installation. For information about User Code, see the printer driver Help.

Installing the PostScript 3 Printer Driver (Windows 2000)



- ☐ Installing this printer driver requires Administrators permission. Log on using an account that has Administrators permission.

1 Quit all applications currently running.

2 Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch “Setup.exe” on the CD-ROM root directory.

3 Select an interface language, and then click [OK].

The default interface language is English.



- ☐ The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Cestina, Magyar, Polski, Portugues, Suomi.

4 Click [PostScript 3 Printer Driver].

Add Printer Wizard starts.

5 Click [Next].

6 Click [Local Printer], and then click [Next].

A dialog box for selecting the printer manufacturer and model name appears.

7 Select the name of the printer whose driver you want to install, and then click [Next].

8 Specify whether or not to print a test page, and then click [Finish].

The printer driver installation starts.

9 Restart the computer to complete installation.



- ☐ A User Code can be set after the printer driver installation. For information about User Code, see the printer driver Help.

Installing the PostScript 3 Printer Driver (Windows XP, Windows Server 2003)



- ☐ Installing this printer driver requires Administrators permission. Log on using an account that has Administrators permission.

1 Quit all applications currently running.

2 Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch “Setup.exe” on the CD-ROM root directory.

3 Select an interface language, and then click [OK].

The default interface language is English.



- ☐ The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Cestina, Magyar, Polski, Portugues, Suomi.

4 Click [PostScript 3 Printer Driver].

Add Printer Wizard starts.

5 Click [Next].

6 Click [Local Printer], and then click [Next].

7 Select the port you want to use, and then click [Next].

A dialog box for selecting the printer manufacturer and model name appears.

8 Select the name of the printer whose driver you want to install, and then click [Next].

9 Change the printer name if you want, and then click [Next].

10 Specify whether or not to print a test page, and then click [Finish].

11 Restart the computer to complete installation.



- ☐ A User Code can be set after the printer driver installation. For information about User Code, see the printer driver Help.

Installing the PostScript 3 Printer Driver (Windows NT 4.0)



- ☐ Installing this printer driver requires Administrators permission. Log on using an account that has Administrators permission.

1 Quit all applications currently running.

2 Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch “Setup.exe” on the CD-ROM root directory.

3 Select an interface language, and then click [OK].

The default interface language is English.



- ☐ The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Cestina, Magyar, Polski, Portugues, Suomi.

4 Click [PostScript 3 Printer Driver].

Add Printer Wizard starts.

5 Click [Next].

6 Select the port you want to use, and then click [Next].

A dialog box for selecting the printer manufacturer and model name appears.

7 Select the name of the printer whose driver you want to install, and then click [Next].

8 Change the printer name if you want, and then click [Next].

9 Click [Next].

10 Specify whether or not to print a test page, and then click [Finish].

11 Restart the computer to complete installation.



- ☐ A User Code can be set after the printer driver installation. For information about User Code, see the printer driver Help.

Installing the Printer Driver Using IEEE 1394 (SCSI print)

The printer drivers can be installed from the CD-ROM provided with this printer.

★ Important

- ☐ Quit all applications currently running, and do not print during installation.
- ☐ Do not connect IEEE 1394 or USB devices to the computer or turn on another printers during installation.
- ☐ Before uninstalling the printer driver, check that the IEEE 1394 interface cable is disconnected from the computer.
- ☐ SCSI print must be set to “active” from the control panel. For details, see [p.145 “Host Interface Menu”](#).
- ☐ This printer can receive print data from one computer at a time only. An message may appear if jobs from different computers collide.
- ☐ If jobs collide, the first received is printed first.
- ☐ When the printer driver is properly installed, connecting or disconnecting the optional IEEE 1394 cable causes the printer icon to change.

Windows 2000

↓ Note

- ☐ If [Found New Hardware Wizard] appears every time the computer is started or the cable is connected, disable the device. To install another printer driver after setting the “1394_00n” port, click [1394_00] as a port during the printer driver installation.
- ☐ Installing this printer driver requires Administrators permission. Log on using an account that has Administrators permission.
- ☐ The optional 1394 interface unit can be used only with Service Pack 1 (SP1) or higher.

- 1** Connect the printer and computer using the IEEE 1394 interface cable.
- 2** Click [Next] in the [Found New Hardware Wizard] dialog box.
- 3** When the message “This wizard will complete the installation for this Device: Unknown” appears, click [Specify a location], and then click [Next >].
- 4** When the message “Locate Driver Files” appears, select the [Optional search locations] check box, and then click [Specify a location], and then click [Next>].

5 To disable Auto Run, press the left [Shift] key when inserting the CD-ROM into the drive and keep it pressed until the computer finishes reading from the CD-ROM.

If Auto Run starts, click **[Cancel]**, and then **[Exit]**.

6 Click [Browse].

7 Select the printer driver you want to use.

If the CD-ROM drive is D, the source files of the printer driver are stored in the following location:

- RPCS
D:DRIVESRPCSWIN2K_XP(Language)DISK1
- PCL 5c
D:DRIVESPCL5cWIN2K_XP(Language)DISK1
- PCL 6
D:DRIVESPCL6WIN2K_XP(Language)DISK1
- PostScript 3
D:DRIVESPS3WIN2K_XP(Language)DISK1

8 Click [Open].

9 Click [OK].

10 Follow the instructions.

When installation is complete, the printer connected to “1394_00n” appears in the **[Printers]** window. (“n” shows the number of printers connected.)



- ☐ If the printer driver has already been installed, the printer icon is added to the **[Printers]** window. In this case, printer driver installation is not necessary.
- ☐ If printing does not work properly after the installation, delete the port and reinstall the printer driver. For details, see “Printer Does Not Print”, Maintenance Guide.
- ☐ If you do not want to install the printer when Found New Hardware Wizard starts under an operating system that supports SCSI print, disable the device by following the procedure below.
 - ① When the **[Found New Hardware Wizard]** dialog box appears, click **[Next >]**.
 - ② When the message “This wizard will complete the installation for this Device: Unknown” appears, select the **[Search for a suitable driver for my device [recommended]]** check box, and then click **[Next>]**.
 - ③ When the message “Please choose your search and installation option.” appears, clear all check boxes from **[Search for the best driver in these locations.]**, and then click **[Next >]**.

- ④ When the message “Driver Files Search Results” appears, select the **[Disable the device. The Add/Remove Hardware Wizard in the control Panel can be able to complete the driver installations.]** check box, and then click **[Finish]**.

Windows XP, Windows Server 2003

★ Important

- ☐ SCSI print must be set to “active” from the control panel. For details, see [p.145 “Host Interface Menu”](#).
- ☐ Installing this printer driver requires Administrators permission. Log on using an account that has Administrators permission.

↓ Note

- ☐ This printer can receive print data from one computer at a time only. If a job from a computer collides with other data, a message may appear on the computer.
- ☐ To install another printer driver after setting the “1394_00n” port, click **[1394_00]** as a port during the printer driver installation.
- ☐ When the printer driver is properly installed, connecting or disconnecting the optional IEEE 1394 cable causes the printer icon to change.

1 Connect the printer and computer using the IEEE 1394 interface cable.

When the **[Found New Hardware Wizard]** dialog box appears, check that **[This wizard helps you install software for: (Unknown)]** is displayed.

2 Select the **[Install from a list on specific location (Advanced)]** check box, and then click **[Next >]**.

3 When the message “Please choose your search and installation option.” appears, select the **[Search for the best driver in these locations.]** check box, and then select the **[Include this location in the search:]** check box.

4 To disable Auto Run, press the left **[SHIFT]** key when inserting the CD-ROM into the drive and keep it pressed until the computer finishes reading from the CD-ROM.

↓ Note

- ☐ If Auto Run starts, click **[Cancel]**, and then **[Exit]**.

5 Specify the location where the source files of the printer driver is stored, and then click **[Next]**.

If the CD-ROM drive is D, the source files of the printer driver are stored in the following location:

- RPCS
D:DRIVESRPCSWIN2K_XP(Language)DISK1

- PCL 5c
D:DRIVESPCL5cWIN2K_XP(Language)DISK1
- PCL 6
D:DRIVESPCL6WIN2K_XP(Language)DISK1
- PostScript 3
D:DRIVESPS3WIN2K_XP(Language)DISK1

When installation is complete, the printer connected to “1394_00n” appears in the **[Printers and Faxes]** window. (“n” shows the number of printers connected.)

6 Follow the instructions.



- ☐ If the printer driver has already been installed, the printer icon is added to the **[Printers and Faxes]** window. In this case, printer driver installation is not necessary.
- ☐ Even if the printer driver is already installed, the message “Found New Hardware Wizard” may appear when the printer and the computer are connected using the IEEE 1394 interface cable for the first time. If it does, install the printer driver.
- ☐ If printing does not work properly after the installation, delete the port and reinstall the printer driver. For details, see “Printer Does Not Print”, Maintenance Guide.
- ☐ If you do not want to install the printer when Found New Hardware Wizard starts under an operating system that supports SCSI print, disable the device by following the procedure below
 - ① When the **[Found New Hardware Wizard]** dialog box appears, check that **[This wizard helps you install software for: Unknown]** displayed, select **[Install from a list on specific location (Advanced)]** check box, and then click **[Next >]**.
 - ② When the message “Please choose your search and installation option.” appears, clear all check boxes from **[Search for the best driver in these locations.]**, and then click **[Next >]**.
 - ③ When the message “The wizard could not find the software on your computer for.” appears, click **[OK]**.
 - ④ When the message “Cannot Install this Hardware” appears, select the **[Don't prompt again to install the software]** check box, and then click **[Finish]**.

Printing with Bluetooth Connection

Supported Profiles

❖ SPP, HCRP

- A maximum of two Bluetooth adaptor or Bluetooth-equipped computers can be connected at the same time using the Bluetooth interface: one by SPP, one by HCRP.
- When connecting more than one Bluetooth adaptor or Bluetooth-equipped computer at the same time, the first device that establishes connection is selected. When selecting the connection between the other devices, cancel the first established connection.
- Conditions for bidirectional communications
 - SPP connection does not support bidirectional communications.
 - HCRP connection supports bidirectional communications.

❖ BIP

- For BIP connection, a module including PostScript 3 must be installed in the printer.
- Only one Bluetooth adaptor or Bluetooth-equipped computer can be connected via BIP.
- Only JPEG images that can be printed using BIP.
- User Codes are disabled for BIP.
You cannot print if print functions are restricted.
- Some printers do not support BIP.

Printing with Bluetooth Connection

To install the printer driver, follow the procedure used to install parallel interface.

★ Important

- ❑ To install the printer driver under Windows 2000/XP Professional, Windows Server 2003, and Windows NT 4.0, you must have an account that has Manage Printers permission. Log on as an Administrators or Power Users group member.

↓ Note

- ❑ System requirements vary depending on the Bluetooth standard and specifications. For details, see the manuals provided with each product.
- ❑ For information about setting up Bluetooth under other operating systems or using it with different utilities, see the manuals provided with those operating systems or utilities.

- 1** Start 3Com Bluetooth Connection Manager.
- 2** Check that the printer you want to use appears in 3Com Bluetooth Connection Manager.
- 3** On the [Tool] menu, click [COM port].
- 4** Check that the message “Bluetooth Serial Client (COMx) ” appears under Client Ports. (X indicates the COM port number used by Bluetooth.)
- 5** Click [Close].
- 6** On the [Start] menu, point to [Settings], and then click [Printers].
The [Printers] window appears.
- 7** Click the icon of the printer you want to use.
- 8** On the [File] menu, click [Properties].
- 9** Click the [Ports] tab.
- 10** Under [Port], select the [COMx:] check box. X indicates the COM port number used by Bluetooth.
- 11** Click [OK].
Close the [Printers] window.

❖ If a dialog box appears while transmitting a print job, reestablish network connection as follows:

- ① Select the printer you want to use in the [Printers and Faxes] box.
- ② Click [Connect].



- ☐ To always use the same printer, select the [Always use for this connection] check box.



For details, see the manuals provided with the Bluetooth adaptor or computer equipped with Bluetooth.

Configuring Security Mode Settings

- 1** Start 3Com Bluetooth Connection Manager.
- 2** On the [Tools] menu, click [Security Mode].
The [Security Mode] dialog box appears.
- 3** Select the security mode in the [Security Mode:] list.

If you click **[High]**, or **[Custom]**, and specify **[Link]** in the **[Custom Settings]** dialog box, enter the Bluetooth password. For information about entering the password, see [p.69 “Send the print job to the printer in use.”](#).

For all other security modes and custom settings, no password is required.



- ☐ For information about each mode, see the manuals provided with the utility.

4 Click [OK].

Close the **[Security Mode]** dialog box.



For details about the security mode, see 3Com Bluetooth Connection Manager Help. For details about the password entry which is required to transmit print jobs, see [p.69 “Printing in the Security Mode”](#).

Printing in the Security Mode

1 Send the print job to the printer in use.

Depending on the computer configuration, the **[Connect]** dialog box may appear. If it does, use it to establish the network connection.

2 The [Authentication] dialog box appears.

3 Enter the Bluetooth password, and then click [OK].

As the Bluetooth password, enter the last four digits of the printer's serial number. You can find the serial number on the label on the back of the printer. For example, if the serial number is 00A0-001234, the Bluetooth password is 1234.

4 The print job is sent.



- ☐ The Bluetooth password differs for each printer and cannot be changed.

If a Message Appears during Installation

Message number 58 or 34 indicates the printer driver cannot be installed using Auto Run. Install the printer driver using **[Add Printer]** or **[>Install Printer]**.

For Windows 95/98/Me, Windows 2000 and Windows NT 4.0:

- 1** On the **[Start]** menu, point to **[Settings]**, and then click **[Printers]**.
- 2** Double-click the **Add Printer** icon.
- 3** Follow the instructions in **Add Printer Wizard**.



- ☐ If the printer driver is on a CD-ROM, the location of the RPCS printer driver is either `DRIVERSRPCSWIN9X_ME`, `DRIVERSRPCSWIN2K_XP`, or `DRIVERSRPCS T4`. If the installer starts, click **[Cancel]** to quit.

For Windows XP Professional and Windows Server 2003:

- 1** On the **[Start]** menu, click **[Printers and Faxes]**.
- 2** Click **[Add a printer]**.
- 3** Follow the instructions in **Add Printer Wizard**.



- ☐ If the printer driver is on a CD-ROM, the location of the RPCS printer driver is `DRIVERSRPCSWIN2K_XP`. If the installer starts, click **[Cancel]** to quit.

For Windows XP Home Editions:

- 1** On the **[Start]** menu, click **[Control Panel]**.
- 2** Click **[Printers and Other Hardware]**.
- 3** Click **[Printers and Faxes]**.
- 4** Click **[Install Printer]**.
- 5** Follow the instructions in **Add Printer Wizard**.



- ☐ If the printer driver is on a CD-ROM, the location of the RPCS printer driver is `\DRIVERS\RPCS\WIN2K_XP`. If the installer starts, click **[Cancel]** to quit.

Making Option Settings for the Printer

Make option settings for the printer using the printer driver when bidirectional communication is disabled.

Reference

For details about making option settings for the printer, see [p.72 “If Bidirectional Communication is Disabled”](#).

Conditions for Bidirectional Communication

Bidirectional communication allows information about paper size and feed direction settings to be automatically sent to the printer. You can check printer status from your computer.

- Bidirectional communication is supported by Windows 95/98/Me/2000/XP, Windows Server 2003, and Windows NT 4.0.
- If you use the RPCS printer driver and bidirectional communication is enabled under Windows 2000, the **[Change Accessories]** tab is unavailable.

Note

- ☐ The RPCS printer driver supports bidirectional communications and updates the printer status automatically.
- ☐ The PCL printer driver supports bidirectional communications. You can update printer status manually.
- ☐ The PostScript 3 printer driver does not support bidirectional communications.

To support bidirectional communication, the following conditions must be met:

❖ When connected with parallel cables

- The computer must support bidirectional communication.
- The printer must support bidirectional communication.
- The interface cable must support bidirectional communication.
- The printer must be connected to the computer using the standard parallel cables and parallel connectors.
- Under Windows 2000, **[Enable bidirectional support]** must be selected, and **[Enable printer pooling]** must not be selected on the **[port]** tab with the RPCS printer driver.

❖ When connected with the network

- The printer must support bidirectional communication.
- SmartDeviceMonitor for Client included on the CD-ROM must be installed, and TCP/IP must be used.

- Under Windows 2000, **[Enable bidirectional support]** must be selected, and **[Enable printer pooling]** must not be selected on the **[port]** tab with the RPCS printer driver.
- In addition to the above, one of the following conditions must also be met:
 - The SmartDeviceMonitor for Client port and the TCP/IP protocol must be used.
 - The standard TCP/IP port must be used without changing the default port name (for Windows 2000/XP and Windows Server 2003).
 - Microsoft TCP/IP print IP address must be specified for use (for Windows NT 4.0).
 - IPP port name must include the IP address when using the IPP protocol.

❖ **When connected with IEEE 1394**

- The computer must support bidirectional communication.
- The printer must be connected to the IEEE 1394 connector of a computer using the IEEE 1394 interface cable.
- **[Activate]** must be selected in the SCSI print of IEEE 1394 and **[Activate]** must be selected in the Bidi-SCSI print.
- Under Windows 2000/XP or Windows Server 2003, **[Enable bidirectional support]** must be selected, and **[Enable printer pooling]** must not be selected on the **[port]** tab with RPCS printer driver.

❖ **When connected with USB**

The printer must be connected to the computer's USB port using the USB interface cable.

The computer must support bidirectional communication.



- ☐ Install SmartDeviceMonitor for Client from the CD-ROM provided.

If Bidirectional Communication is Disabled

Set up option settings when bidirectional communications are disabled.



- ☐ Under Windows 2000/XP and Windows Server 2003, Manage Printers permission is required to change the printer properties in the **[Printers]** folder. Log on as an Administrators or Power Users group member.
- ☐ Under Windows NT 4.0, Full Control permission is required to change the printer properties in the **[Printers]** folder. Log on as an Administrators or Power Users group member.

1 On the **[Start]** menu, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

2 Click the icon of the printer you want to use.

3 On the [File] menu, click [Properties].

4 Click the [Accessories] tab.

If options in the [Change Accessories] tab are disabled, bidirectional connection is enabled. In this case, no change is necessary for option settings.



- ☐ If you are using the RPCS printer driver, click the [Change Accessories] tab.
- ☐ If you are using the PS printer driver, click the [Device Settings] tab.

5 Select options installed from the [Option] area, and then make the necessary settings.

6 Select the total amount of the memory in [Total Memory:], when the optional SDRAM module is added.

7 Under [Paper source tray settings], click and highlight the tray to be used, and then select the appropriate size, position, and type for the tray. Select the [Tray locking] check box to exclude the tray from the targets of automatic tray selection.

8 Click [OK] to close the printer properties dialog box. Click the [Defaults] tab, and then click [Change Accessories] to display the option selection.

PCL - Accessing the Printer Properties

Windows 95/98/Me - Accessing the Printer Properties

There are two methods to open the printer properties dialog box.

Making printer default settings

To make the printer default settings, open the printer properties dialog box from the **[Printers]** window.



- ☐ You cannot change the printer default settings for each user. Settings made in the printer properties dialog box are applied to all users.

1 On the **[Start]** menu, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

2 Click the icon of the printer you want to use.

3 On the **[File]** menu, click **[Properties]**.

4 Make the necessary settings, and then click **[OK]**.



- ☐ With some applications, the printer driver settings are not used, and the application's own default settings are applied.



For details, see the printer driver Help.

Making printer settings from an application

You can make printer settings for a specific application.

To make printer settings for a specific application, open the printer properties dialog box from that application. The following explains how to make settings for the WordPad application provided with Windows 95/98/Me.

1 On the **[File]** menu, click **[Print]**.

The **[Print]** dialog box appears.

2 Select the printer you want to use in the **[Name]** list, and then click **[Properties]**.

The printer properties dialog box appears.

3 Make the necessary settings, and then click **[OK]**.

4 Click **[OK]** to start printing.

 Note

- ☐ The procedure to open the printer properties dialog box may vary depending on the application. For details, see the manuals provided with the application you use.
- ☐ With some applications, the printer driver settings are not used, and the application's own default settings are applied.
- ☐ Any settings you make in the following procedure are valid for the current application only.
- ☐ General users can change the properties displayed in the **[Print]** dialog box of an application. Settings made here are used as defaults when printing from this application.

 Reference

For details, see the printer driver Help.

Windows 2000 - Accessing the Printer Properties

Making printer default settings - the printer properties

 Important

- ☐ To change the printer default settings including option configuration settings, log on using an account that has Manage Printers permission. Members of the Administrators and Power Users groups have Manage Printers permission by default.
- ☐ You cannot change the printer default settings for each user. Settings made in the printer properties dialog box are applied to all users.

1 On the **[Start]** menu, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

2 Click the icon of the printer you want to use.

3 On the **[File]** menu, click **[Properties]**.

The printer properties dialog box appears.

4 Make the necessary settings, and then click **[OK]**.

 Note

- ☐ Settings you make here are used as the default settings for all applications.
- ☐ Do not make a setting for **[Form to Tray Assignment]**.

 Reference

For details, see the printer driver Help.

Making printer default settings - Printing Preferences

★ Important

- ☐ You cannot change the printer default settings for each user. Settings made in the printer properties dialog box are applied to all users.

1 On the [Start] menu, point to [Settings], and then click [Printers].

The [Printers] window appears.

2 Click the icon of the printer you want to use.

3 On the [File] menu, click [Printing Preferences...].

The [Printing Preferences] dialog box appears.

4 Make the necessary settings, and then click [OK].

↓ Note

- ☐ Settings you make here are used as the default settings for all applications.

📖 Reference

For details, see the printer driver Help.

Making printer settings from an application

You can make printer settings for a specific application.

To make printer settings for a specific application, open the [Printing Preferences] dialog box from that application. The following explains how to make settings for the WordPad application provided with Windows 2000.

↓ Note

- ☐ The procedure to open the [Printing Preferences] dialog box may vary depending on the application. For details, see the manuals provided with the application you use.
- ☐ Any settings you make in the following procedure are valid for the current application only.
- ☐ General users can change the properties displayed in the [Print] dialog box of an application. Settings made here are used as defaults when printing from this application.

1 On the [File] menu, click [Print...].

The [Print] dialog box appears.

2 Select the printer you want to use in the [Select Printer] list.

3 Make the necessary settings, and then click [Apply] to start printing.

📖 Reference

For details, see the printer driver Help.

Windows XP, Windows Server 2003 - Accessing the Printer Properties

Making printer default settings - the printer properties

★ Important

- ☐ To change the printer default settings including option configuration settings, log on using an account that has Manage Printers permission. Members of the Administrators and Power Users groups have Manage Printers permission by default.
- ☐ You cannot change the printer default settings for each user. Settings made in the printer properties dialog box are applied to all users.

1 On the [Start] menu, click [Printers and Faxes].

The [Printers and Faxes] window appears.

2 Click the icon of the printer you want to use.

3 On the [File] menu, click [Properties].

The printer properties dialog box appears.

4 Make the necessary settings, and then click [OK].

↓ Note

- ☐ Settings you make here are used as the default settings for all applications.
- ☐ Do not make a setting for [Form to Tray Assignment].

📖 Reference

For details, see the printer driver Help.

Making printer default settings - Printing Preferences

★ Important

- ☐ You cannot change the printer default settings for each user. Settings made in the printer properties dialog box are applied to all users.

1 On the [Start] menu, click [Printers and Faxes].

The [Printers and Faxes] window appears.

2 Click the icon of the printer you want to use.

3 On the [File] menu, click [Printing Preferences...].

The [Printing Preferences] dialog box appears.

4 Make the necessary settings, and then click [OK].



- ☐ Settings you make here are used as the default settings for all applications.



For details, see the printer driver Help.

Making printer settings from an application

You can make printer settings for a specific application.

To make printer settings for a specific application, open the **[Printing Preferences]** dialog box from that application. The following explains how to make settings for the WordPad application provided with Windows XP.



- ☐ The procedure to open the **[Printing Preferences]** dialog box may vary depending on the application. For details, see the manuals provided with the application you use.
- ☐ Any settings you make in the following procedure are valid for the current application only.
- ☐ General users can change the properties displayed in the **[Print]** dialog box of an application. Settings made here are used as defaults when printing from this application.

1 On the **[File]** menu, click **[Print...]**.

The **[Print]** dialog box appears.

2 Select the printer you want to use in the **[Select Printer]** list.

3 Make the necessary settings, and then click **[Apply]** to start printing.



For details, see the printer driver Help.

Windows NT 4.0 - Accessing the Printer Properties

Making printer default settings - the printer properties



- ☐ To change the printer default settings including option configuration settings, log on using an account that has Full Control permission. Members of the Administrators, Server Operators, Print Operators, and Power Users groups have Full Control permission by default.
- ☐ You cannot change the printer default settings for each user. Settings made in the printer properties dialog box are applied to all users.

1 On the **[Start]** menu, point to **[Settings]**, and then click **[Printers]**.

The [Printers] window appears.

2 Click the icon of the printer you want to use.

3 On the [File] menu, click [Properties].

The printer properties dialog box appears.

4 Make the necessary settings, and then click [OK].



- ☐ Settings you make here are used as the default settings for all applications.
- ☐ Do not make a setting for [Form to Tray Assignment].



For details, see the printer driver Help.

Making printer default settings - Default



- ☐ To change the printer default settings including option configuration settings, log on using an account that has Full Control permission. Members of the Administrators, Server Operators, Print Operators, and Power Users groups have Full Control permission by default.
- ☐ You cannot change the printer default settings for each user. Settings made in the printer properties dialog box are applied to all users.

1 On the [Start] menu, point to [Settings], and then click [Printers].

The [Printers] window appears.

2 Click the icon of the printer you want to use.

3 On the [File] menu, click [Document Defaults].

The [Default] dialog box appears.

4 Make the necessary settings, and then click [OK].



- ☐ Settings you make here are used as the default settings for all applications.



For details, see the printer driver Help.

Making printer settings from an application

You can make printer settings for a specific application.

To make printer settings for a specific application, open the printer properties dialog box from that application. The following explains how to make settings for the WordPad application provided with Windows NT 4.0.

 **Note**

- ☐ The procedure to open the printer properties dialog box may vary depending on the application. For details, see the manuals provided with the application you use.
- ☐ With some applications, the printer driver settings are not used, and the application's own default settings are applied.
- ☐ Any settings you make in the following procedure are valid for the current application only.
- ☐ General users can change the properties displayed in the **[Print]** dialog box of an application. Settings made here are used as defaults when printing from this application.

1 On the [File] menu, click [Print].

The **[Print]** dialog box appears.

2 Select the printer you want to use in the [Name] list, and then click [Properties].

The printer properties dialog box appears.

3 Make the necessary settings, and then click [OK].

4 Click [OK] to start printing.

 **Reference**

For details, see the printer driver Help.

RPCS - Accessing the Printer Properties

Windows 95/98/Me - Accessing the Printer Properties

There are two dialog box types of the printer properties dialog box.

“Multi-tab” is used as an example in this manual. For details about changing the dialog box types, see the printer driver Help.

❖ Multi-tab

This dialog box type is designed for users who often change print settings to perform various printing operations.

❖ Custom Setting

This dialog box type is designed for users who rarely change print settings. This type of dialog box may vary depending on the installed options.

Making printer default settings

To make the printer default settings, open the printer properties dialog box from the **[Printers]** window.

★ Important

- ☐ You cannot change the printer default settings for each user. Settings made in the printer properties dialog box are applied to all users.

↓ Note

- ☐ With some applications, the printer driver settings are not used, and the application's own default settings are applied.

1 On the **[Start]** menu, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

2 Click the icon of the printer you want to use.

3 On the **[File]** menu, click **[Properties]**.

↓ Note

- ☐ When you open the printer properties dialog box initially after installing the RPCS printer driver, a confirmation message appears. After clicking **[OK]**, the printer properties dialog box appears.

4 Make the necessary settings, and then click **[OK]**.

📖 Reference

For details, see the printer driver Help.

Making printer settings from an application

You can make printer settings for a specific application.

To make printer settings for a specific application, open the printer properties dialog box from that application. The following explains how to make settings for the WordPad application provided with Windows 95/98/Me.

Note

- ☐ The procedure to open the printer properties dialog box may vary depending on the application. For details, see the manuals provided with the application you use.
- ☐ With some applications, the printer driver settings are not used, and the application's own default settings are applied.
- ☐ Any settings you make in the following procedure are valid for the current application only.
- ☐ General users can change the properties displayed in the **[Print]** dialog box of an application. Settings made here are used as defaults when printing from this application.

1 On the **[File]** menu, click **[Print]**.

The **[Print]** dialog box appears.

2 Select the printer you want to use in the **[Name]** list, and then click **[Properties]**.

The printer properties dialog box appears.

3 Make the necessary settings, and then click **[OK]**.

4 Click **[OK]** to start printing.

Reference

For details, see the printer driver Help.

Windows 2000 - Accessing the Printer Properties

Making printer default settings - the printer properties

Important

- ☐ To change the printer default settings including option configuration settings, log on using an account that has Manage Printers permission. Members of the Administrators and Power Users groups have Manage Printers permission by default.
- ☐ You cannot change the printer default settings for each user. Settings made in the printer properties dialog box are applied to all users.

1 On the **[Start]** menu, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

2 Click the icon of the printer you want to use.

3 On the **[File]** menu, click **[Properties]**.

The printer properties dialog box appears.



- ☐ When you open the printer properties dialog box initially after installing the RPCS printer driver, a confirmation message appears. After clicking **[OK]**, the printer properties dialog box appears.

4 Make the necessary settings, and then click **[OK]**.



- ☐ Settings you make here are used as the default settings for all applications.
- ☐ Do not make a setting for **[Form to Tray Assignment]**.



For details, see the printer driver Help.

Making printer default settings - Printing Preferences



- ☐ You cannot change the printer default settings for each user. Settings made in the printer properties dialog box are applied to all users.

1 On the **[Start]** menu, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

2 Click the icon of the printer you want to use.

3 On the **[File]** menu, click **[Printing Preferences...]**.

The **[Printing Preferences]** dialog box appears.

4 Make the necessary settings, and then click **[OK]**.



- ☐ Settings you make here are used as the default settings for all applications.



For details, see the printer driver Help.

Making printer settings from an application

You can make printer settings for a specific application.

To make printer settings for a specific application, open the **[Printing Preferences]** dialog box from that application. The following explains how to make settings for the WordPad application provided with Windows 2000.

 **Note**

- ☐ The procedure to open the **[Printing Preferences]** dialog box may vary depending on the application. For details, see the manuals provided with the application you use.
- ☐ Any settings you make in the following procedure are valid for the current application only.
- ☐ General users can change the properties displayed in the **[Print]** dialog box of an application. Settings made here are used as defaults when printing from this application.

1 On the [File] menu, click [Print...].

The **[Print]** dialog box appears.

2 Select the printer you want to use in the [Select Printer] list.

3 Make the necessary settings, and then click [Apply] to start printing.

 **Reference**

For details, see the printer driver Help.

Windows XP, Windows Server 2003 - Accessing the Printer Properties

Making printer default settings - the printer properties

 **Important**

- ☐ To change the printer default settings including option configuration settings, log on using an account that has Manage Printers permission. Members of the Administrators and Power Users groups have Manage Printers permission by default.
- ☐ You cannot change the printer default settings for each user. Settings made in the printer properties dialog box are applied to all users.

1 On the [Start] menu, click [Printers and Faxes].

The **[Printers and Faxes]** window appears.

2 Click the icon of the printer you want to use.

3 On the [File] menu, click [Properties].

The printer properties dialog box appears.

 **Note**

- ☐ When you open the printer properties dialog box initially after installing the RPCS printer driver, a confirmation message appears. After clicking **[OK]**, the printer properties dialog box appears.

4 Make the necessary settings, and then click [OK].



- ☐ Settings you make here are used as the default settings for all applications.
- ☐ Do not make a setting for **[Form to Tray Assignment]**.



For details, see the printer driver Help.

Making printer default settings - Printing Preferences



- ☐ You cannot change the printer default settings for each user. Settings made in the printer properties dialog box are applied to all users.

1 On the [Start] menu, click [Printers and Faxes].

The **[Printers and Faxes]** window appears.

2 Click the icon of the printer you want to use.

3 On the [File] menu, click [Printing Preferences...].

The **[Printing Preferences]** dialog box appears.

4 Make the necessary settings, and then click [OK].



- ☐ Settings you make here are used as the default settings for all applications.



For details, see the printer driver Help.

Making printer settings from an application

You can make printer settings for a specific application.

To make printer settings for a specific application, open the **[Printing Preferences]** dialog box from that application. The following explains how to make settings for the WordPad application provided with Windows XP.



- ☐ The procedure to open the **[Printing Preferences]** dialog box may vary depending on the application. For details, see the manuals provided with the application you use.
- ☐ Any settings you make in the following procedure are valid for the current application only.
- ☐ General users can change the properties displayed in the **[Print]** dialog box of an application. Settings made here are used as defaults when printing from this application.

1 On the [File] menu, click [Print...].

The [Print] dialog box appears.

2 Select the printer you want to use in the [Select Printer] list.

3 Make the necessary settings, and then click [Apply] to start printing.



For details, see the printer driver Help.

Windows NT 4.0 - Accessing the Printer Properties

Making printer default settings - the printer properties



- ☐ To change the printer default settings including option configuration settings, log on using an account that has Full Control permission. Members of the Administrators, Server Operators, Print Operators, and Power Users groups have Full Control permission by default.
- ☐ You cannot change the printer default settings for each user. Settings made in the printer properties dialog box are applied to all users.

1 On the [Start] menu, point to [Settings], and then click [Printers].

The [Printers] window appears.

2 Click the icon of the printer you want to use.

3 On the [File] menu, click [Properties].

The printer properties dialog box appears.



- ☐ When you open the printer properties dialog box initially after installing the RPCS printer driver, a confirmation message appears. After clicking [OK], the printer properties dialog box appears.

4 Make the necessary settings, and then click [OK].



- ☐ Settings you make here are used as the default settings for all applications.
- ☐ Do not make a setting for [Form to Tray Assignment].



For details, see the printer driver Help.

Making printer default settings - Default

★ Important

- ☐ To change the printer default settings including option configuration settings, log on using an account that has Full Control permission. Members of the Administrators, Server Operators, Print Operators, and Power Users groups have Full Control permission by default.
- ☐ You cannot change the printer default settings for each user. Settings made in the printer properties dialog box are applied to all users.

1 On the [Start] menu, point to [Settings], and then click [Printers].

The [Printers] window appears.

2 Click the icon of the printer you want to use.

3 On the [File] menu, click [Document Defaults...].

The [Default] dialog box appears.

4 Make the necessary settings, and then click [OK].

↓ Note

- ☐ Settings you make here are used as the default settings for all applications.

📖 Reference

For details, see the printer driver Help.

Making printer settings from an application

You can make printer settings for a specific application.

To make printer settings for a specific application, open the printer properties dialog box from that application. The following explains how to make settings for the WordPad application provided with Windows NT 4.0.

↓ Note

- ☐ The procedure to open the printer properties dialog box may vary depending on the application. For details, see the manuals provided with the application you use.
- ☐ With some applications, the printer driver settings are not used, and the application's own default settings are applied.
- ☐ Any settings you make in the following procedure are valid for the current application only.
- ☐ General users can change the properties displayed in the [Print] dialog box of an application. Settings made here are used as defaults when printing from this application.

1 On the [File] menu, click [Print].

The [Print] dialog box appears.

- 2** Select the printer you want to use in the [Name] list, and then click [Properties].

The printer properties dialog box appears.

- 3** Make the necessary settings, and then click [Apply].

- 4** Click [OK] to start printing.



For details, see the printer driver Help.

PostScript 3 - Setting Up for Printing

Windows 95/98/Me - Accessing the Printer Properties

There are two methods to open the printer properties dialog box.

Making printer default settings

To make the printer default settings, open the printer properties dialog box from the **[Printers]** window.



- ☐ You cannot change the printer default settings for each user. Settings made in the printer properties dialog box are applied to all users.



- ☐ With some applications, the printer driver settings are not used, and the application's own default settings are applied.

1 On the **[Start]** menu, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

2 Click the icon of the printer you want to use.

3 On the **[File]** menu, click **[Properties]**.

The printer properties dialog box appears.

4 Make the necessary settings, and then click **[OK]**.

5 Click **[OK]**.



For details, see the printer driver Help.

Making printer settings from an application

You can make printer settings for a specific application.

To make printer settings for a specific application, open the printer properties dialog box from that application. The following explains how to make settings for the WordPad application provided with Windows 95/98/Me.



- ☐ The procedure to open the printer properties dialog box may vary depending on the application. For details, see the manuals provided with the application you use.
- ☐ With some applications, the printer driver settings are not used, and the application's own default settings are applied.

- ☐ Any settings you make in the following procedure are valid for the current application only.
- ☐ General users can change the properties displayed in the **[Print]** dialog box of an application. Settings made here are used as defaults when printing from this application.

1 On the [File] menu, click [Print].

The **[Print]** dialog box appears.

2 Select the printer you want to use in the [Name] list, and then click [Properties].

The printer properties dialog box appears.

3 Make the necessary settings, and then click [OK].

4 Click [OK] to start printing.



For details, see the printer driver Help.

Windows 2000 - Accessing the Printer Properties

Making printer default settings - the printer properties

★ Important

- ☐ To change the printer default settings including option configuration settings, log on using an account that has Manage Printers permission. Members of the Administrators and Power Users groups have Manage Printers permission by default.
- ☐ You cannot change the printer default settings for each user. Settings made in the printer properties dialog box are applied to all users.

1 On the [Start] menu, point to [Settings], and then click [Printers].

The **[Printers]** window appears.

2 Click the icon of the printer you want to use.

3 On the [File] menu, click [Properties].

The printer properties dialog box appears.

4 Make the necessary settings, and then click [OK].



- ☐ Settings you make here are used as the default settings for all applications.
- ☐ Do not make a setting for **[Form to Tray Assignment]**.



For details, see the printer driver Help.

Making printer default settings - Printing Preferences



- ☐ You cannot change the printer default settings for each user. Settings made in the printer properties dialog box are applied to all users.

1 On the [Start] menu, point to [Settings], and then click [Printers].

The [Printers] window appears.

2 Click the icon of the printer you want to use.

3 On the [File] menu, click [Printing Preferences...].

The [Printing Preferences] dialog box appears.

4 Make the necessary settings, and then click [OK].



- ☐ Settings you make here are used as the default settings for all applications.



For details, see the printer driver Help.

Making printer settings from an application

You can make printer settings for a specific application.

To make printer settings for a specific application, open the [Printing Preferences] dialog box from that application. The following explains how to make settings for the WordPad application provided with Windows 2000.



- ☐ The procedure to open the [Printing Preferences] dialog box may vary depending on the application. For details, see the manuals provided with the application you use.
- ☐ Any settings you make in the following procedure are valid for the current application only.
- ☐ General users can change the properties displayed in the [Print] dialog box of an application. Settings made here are used as defaults when printing from this application.

1 On the [File] menu, click [Print...].

The [Print] dialog box appears.

2 Select the printer you want to use in the [Select Printer] list.

3 Make the necessary settings, and then click [Print] to start printing.



For details, see the printer driver Help.

Windows XP, Windows Server 2003 - Accessing the Printer Properties

Making printer default settings - the printer properties



- ☐ To change the printer default settings including option configuration settings, log on using an account that has Manage Printers permission. Members of the Administrators and Power Users groups have Manage Printers permission by default.
- ☐ You cannot change the printer default settings for each user. Settings made in the printer properties dialog box are applied to all users.

1 On the [Start] menu, click [Printers and Faxes].

The [Printers and Faxes] window appears.

2 Click the icon of the printer you want to use.

3 On the [File] menu, click [Properties].

The printer properties dialog box appears.

4 Make the necessary settings, and then click [OK].



- ☐ Settings you make here are used as the default settings for all applications.
- ☐ Do not make a setting for [Form to Tray Assignment].



For details, see the printer driver Help.

Making printer default settings - Printing Preferences



- ☐ You cannot change the printer default settings for each user. Settings made in the printer properties dialog box are applied to all users.

1 On the [Start] menu, click [Printers and Faxes].

The [Printers and Faxes] window appears.

2 Click the icon of the printer you want to use.

3 On the [File] menu, click [Printing Preferences...].

The [Printing Preferences] dialog box appears.

4 Make the necessary settings, and then click [OK].



- ☐ Settings you make here are used as the default settings for all applications.



For details, see the printer driver Help.

Making printer settings from an application

You can make printer settings for a specific application.

To make printer settings for a specific application, open the **[Printing Preferences]** dialog box from that application. The following explains how to make settings for the WordPad application provided with Windows XP.



- ☐ The procedure to open the **[Printing Preferences]** dialog box may vary depending on the application. For details, see the manuals provided with the application you use.
- ☐ Any settings you make in the following procedure are valid for the current application only.
- ☐ General users can change the properties displayed in the **[Print]** dialog box of an application. Settings made here are used as defaults when printing from this application.

1 On the [File] menu, click [Print...].

The **[Print]** dialog box appears.

2 Select the printer you want to use in the [Select Printer] list.

3 Make the necessary settings, and then click [Print] to start printing.



For details, see the printer driver Help.

Windows NT 4.0 - Accessing the Printer Properties

Making printer default settings - the printer properties



- ☐ To change the printer default settings including option configuration settings, log on using an account that has Full Control permission. Members of the Administrators, Server Operators, Print Operators, and Power Users groups have Full Control permission by default.
- ☐ You cannot change the printer default settings for each user. Settings made in the printer properties dialog box are applied to all users.

- 1** On the [Start] menu, point to [Settings], and then click [Printers].

The [Printers] window appears .

- 2** Click the icon of the printer you want to use.

- 3** On the [File] menu, click [Properties].

The printer properties dialog box appears.

- 4** Make the necessary settings, and then click [OK].



- ☐ Settings you make here are used as the default settings for all applications.
- ☐ Do not make a setting for [Form to Tray Assignment].



For details, see the printer driver Help.

Making printer default settings - Default



- ☐ To change the printer default settings including option configuration settings, log on using an account that has Full Control permission. Members of the Administrators, Server Operators, Print Operators, and Power Users groups have Full Control permission by default.
- ☐ You cannot change the printer default settings for each user. Settings made in the printer properties dialog box are applied to all users.

- 1** On the [Start] menu, point to [Settings], and then click [Printers].

The [Printers] window appears.

- 2** Click the icon of the printer you want to use.

- 3** On the [File] menu, click [Document Defaults].

The [Default] dialog box appears.

- 4** Make the necessary settings, and then click [OK].



- ☐ Settings you make here are used as the default settings for all applications.



For details, see the printer driver Help.

Making printer settings from an application

You can make printer settings for a specific application.

To make printer settings for a specific application, open the printer properties dialog box from that application. The following explains how to make settings for the WordPad application provided with Windows NT 4.0.

 **Note**

- ☐ The procedure to open the printer properties dialog box may vary depending on the application. For details, see the manuals provided with the application you use.
- ☐ With some applications, the printer driver settings are not used, and the application's own default settings are applied.
- ☐ Any settings you make in the following procedure are valid for the current application only.
- ☐ General users can change the properties displayed in the **[Print]** dialog box of an application. Settings made here are used as defaults when printing from this application.

1 On the [File] menu, click [Print].

The **[Print]** dialog box appears.

2 Select the printer you want to use in the [Name] list, and then click [Properties].

The printer properties dialog box appears.

3 Make the necessary settings, and then click [OK].

4 Click [OK] to start printing.

 **Reference**

For details, see the printer driver Help.

Mac OS - Setting Up for Printing

Making paper settings from an application

1 Open the file you want to print.

2 On the [File] menu, click [Page Setup].

3 Check that the printer you want to use is displayed in [Format for:], and then select the paper size you want to use in [Paper].

Under Mac OS X, select the paper size in **[Paper Size]**.

 **Note**

- ☐ If the printer you want to use is not displayed in **[Format for:]**, select the printer you want to use.

 Reference

The **[Page Setup]** dialog box varies depending on the application you use. For details, see the manuals provided with the Mac OS.

4 Configure the settings, and then click **[OK]**.

Setting up for printing from an application

1 Open the file you want to print.

2 On the **[File]** menu, click **[Print]**.

3 Check that the printer is selected in the **[Printer]** list, and then make the printer settings.

4 Configure the settings, and then click **[OK]**.

Printing a PDF File Directly

You can send PDF files directly to this printer to print, without opening its application.

★ Important

- ☐ This is possible for Adobe PDF files only.
- ☐ PDF files of versions 1.3, 1.4, and 1.5 are supported.
- ☐ Transparency and JBIG2 which are functions of version 1.4 are not supported.
- ☐ Functions of 1.5 file format are not supported.

Using DeskTopBinder Lite

PDF files added with DeskTopBinder Lite can be sent directly to this printer for printing.

★ Important

- ☐ The RPCS printer driver must be installed.
- ☐ PDF Direct Print is not available with some versions of DeskTopBinder Lite. Use DeskTopBinder Lite installed from the CD-ROM provided with this printer.

↓ Note

- ☐ PDF Direct Print settings can be made from PDF Direct Print properties.
- ☐ You must configure the port before you can use DeskTopBinder Lite.

📖 Reference

For details, see DeskTopBinder Lite Help.

Installing DeskTopBinder Lite

Follow the procedure below to install DeskTopBinder Lite.

- 1** Quit all applications currently running.
- 2** Insert the CD-ROM into the CD-ROM drive.

The installer starts.

↓ Note

- ☐ Auto Run may not work under certain operating system settings. In this case, launch "Setup.exe" located on the CD-ROM root directory.

- 3** Select an interface language, and then click [OK].
- 4** Click [DeskTopBinder Lite] , and then click [Next >].

5 Follow the instructions on the display to install DeskTopBinder Lite.

If you are required to restart the computer after installing DeskTopBinder Lite, restart the computer and continue the configuration.

DeskTopBinder Lite Enhancements

Follow the DeskTopBinder Lite enhancement procedure to print PDF files directly.

1 On the [Start] menu, click [Programs], [DeskTopBinder], and [Extended Features Wizard].

2 When [Extended Features Wizard] appears, select [Start], and then click [Next] repeatedly until the [Printing Functions3] screen appears.

3 On the [Printing Functions3] screen, click [Add] to display [PDF Direct Print Properties].

4 Select Driver for This Machine, click [OK], and then click [Next] repeatedly until [Finish] is displayed.

Click [Finish].

Function Palette

The Function palette contains buttons for functions that are already configured through DeskTopBinder Lite enhancement. Using these buttons, you can print Windows files, preview printouts, convert images, and register scanners for documents without having to open DeskTopBinder Lite. You can also use these functions simply by dragging a target file to the button corresponding to the required function and dropping it there.

1 On the [Start] menu, click [Programs], [DeskTopBinder], and [Function Palette].

An icon for the Function palette is added to the task bar displayed at the bottom right of the screen.

2 Right-click the icon that is added to the task bar, and then click [Properties] to display the Properties screen.

3 Click the [Contents] tab, select the [PDF Direct Printing] check box at the center, and then click [OK].

The [Properties] screen closes and the [PFD Direct Printing] icon is added to the palette.

PDF Direct Printing

Use the method below to print PDF files directly.

- 1** Drag the PDF file you want to print to the PDF Direct Printing icon in the palette and drop it there.
- 2** [Output File List-PDF Direct Print] is displayed.
Highlight the PDF you want to print, and then click [OK].
The PDF file is printed.

Printing PDF Password-Protected Documents

Follow the procedure below to print password-protected PDF files.

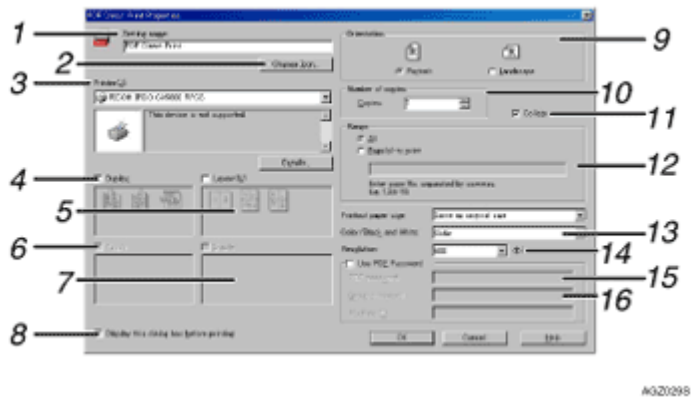
- 1** In the Windows [Start] menu, click [Programs], [DeskTopBinder], and [Extended Features Wizard].
- 2** When [Extended Features Wizard] appears, select [Start], and then click [Next] repeatedly until the [Printing Functions3] screen appears.
- 3** On the [Printing Functions3] screen, click [Properties...] to display [PDF Direct Print Properties].
- 4** Select the [Use PDF Password] check box at the bottom right of the screen, and then click [OK].
Click [Next] repeatedly until [Finish] appears.
Click [Finish] to close the [Extended Features Wizard] screen.
- 5** Move the PDF file you want to print to the PDF Direct Printing icon on the palette using a drag-and-drop operation.
- 6** [Output File List-PDF Direct Print] is displayed.
Select the PDF file you want to output to make it reverse video, and then click [OK].
- 7** The [PDF Direct Print Properties] screen opens.
Enter the password for the PDF file you want to print in the [PDF Password] field at the bottom right of the screen, and then click [OK].
The password-protected PDF file is printed.

★ Important

- ☐ Before printing a password-protected PDF file, perform one of the following:
 - Enter the PDF password in the PDF Direct Printing Properties screen
 - Specify a PDF password by selecting [Change Password] in the [PDF Configuration] menu on the control panel of this machine

- ❑ If a **[Group Password]** for the **[PDF Configuration]** menu is assigned to either DeskTopBinder Lite or the control panel of this machine, a same group password needs to be assigned to the other.

PDF Direct Print Properties



1. Setting name:

Displays the plug-in configuration name (up to 63 single byte characters)

2. Change Icon...

Change the icon displayed on the tool bar.

3. Printer name:

Displays a list of RPCS drivers that support PDF direct printing.

4. Duplex

Print on both sides of sheets.

5. Layout

Print multiple pages on a single sheet.

6. Punch

Punch holes in output sheets.

7. Staples

Staple together output sheets.

8. "Display this dialog box before printing" Dialog box

Appears in PDF direct printing mode if this check box is selected.

9. Orientation:

Specify the original's orientation.

10. Number of copies

Specify the number of copies to print.

11. Collate

Use to sort prints.

12. Range

Specify the print area on each page.

13. Color/Black and White:

Specify color or black-and-white printing.

14. Resolution

Specify a print resolution.

15. PDF Password

If the PDF file is password-protected, enter the password in this field. Otherwise, the file cannot be printed.

16. Group Password

If a group password is assigned to DeskTopBinder Lite and this machine, enter the group password in this field. Otherwise, printing cannot start.

Using Commands

Under Windows and UNIX, you can print PDF files directly, using commands such as “ftp” and “lpr”.

Reference

For details about printing using commands under Windows, see [p.245 “Printing Files Directly from Windows”](#).

For details about printing using commands under UNIX, see UNIX Supplement.

Sample Print

Use this function to print the first set of a multiple-set print job. After checking the results, the remaining sets can be printed using the control panel. This function can protect you from printing a large quantity of misprints.

★ Important

- ❑ To use this function, the optional hard disk must be installed on the printer.
- ❑ The number of pages the printer can save varies depending on the contents of the print images. At most, the printer can save 30 jobs or 1,100 pages for Sample Print and Locked Print. At most, the printer can store up to 1,000 pages for 1 job.
- ❑ If you turn off the power, the job saved on the hard disk will be deleted.
- ❑ Sample Print files will not appear on the display panel if they have already been executed or deleted using the Web browser before you select “Sample Print” from the control panel.
- ❑ Sample Print files printed or deleted using Web Image Monitor, after you select **[Sample Print]** using the control panel will appear on the display panel. However, an error message will appear if you try to print or delete those Sample Print files.

↓ Note

- ❑ You can identify the file you want to print by the user ID and the time when the job was stored.
- ❑ If the first set of the Sample Print file is not as you expected and you do not want to print the remaining sets, delete the Sample Print file using the control panel or Web Image Monitor.
- ❑ The job in the printer is deleted automatically after all Sample Print files are printed.
- ❑ Follow the procedure below to use this function with the PCL or RPCS printer driver under Windows. If you want to use this function under Mac OS, see [p.260 “Using PostScript 3”](#).

☰ Reference

For details about settings for the printer driver, see the printer driver Help.

Files specified for Sample Print can be printed or deleted using Web Image Monitor. For details, see Web Image Monitor Help.

Printing the First Set

- 1 From an application, select a command to print.**

The **[Print]** dialog box appears.

- 2** Select the printer you want to use in the [Name] list, and then click [Properties].

The printer properties dialog box appears.

- 3** In the [Job type:] box, click [Sample Print].

- 4** In the [User ID:] box, enter a user ID using up to eight alphanumeric characters.

This is used to identify the user. The user ID can be entered using up to eight alphanumeric (a-z, A-Z, 0-9) characters.

- 5** Execute a command to print.

The job is saved on the hard disk.

- 6** Check the print job, and then use the control panel to print the remaining sets or delete them.

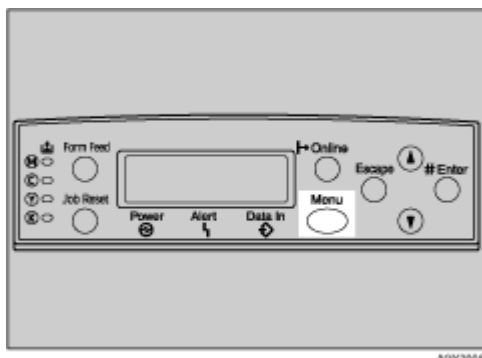


[p.103 "Printing the Remaining Sets".](#)

[p.104 "Deleting a Sample Print File".](#)

Printing the Remaining Sets

- 1** Press the [Menu] key.



The [Menu] screen appears.

- 2** Press the [▲] or [▼] key to display [Sample Print], and then press the [# Enter] key.

The user ID and the time when the job was stored appear.

- 3** Press the [▲] or [▼] key to display the file you want to print, and then press the [# Enter] key.

- 4** Check that [Print File] is displayed, and then press the [# Enter] key.

The number of remaining sets appears.

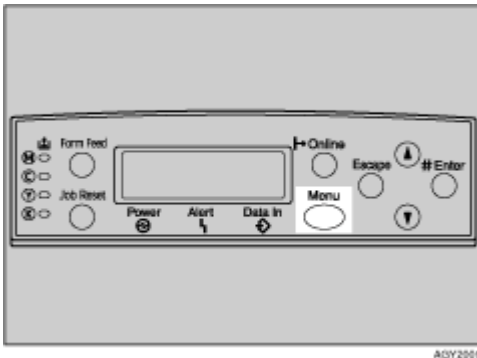
To cancel printing, press the **[Escape]** key.

- 5 Press the **[# Enter]** key. To change the number of sets you want to print, press the **[▲]** or **[▼]** key and select the number of sets, and then press the **[# Enter]** key.**

After the job is printed, the job saved on the hard disk is deleted.

Deleting a Sample Print File

- 1 Press the **[Menu]** key.**



The **[Menu]** screen appears.

- 2 Press the **[▲]** or **[▼]** key to display **[Sample Print]**, and then press the **[# Enter]** key.**
- 3 Press the **[▲]** or **[▼]** key to display the file you want to delete, and then press the **[# Enter]** key.**
- 4 Press the **[▲]** or **[▼]** key to display **[Delete File]**, and then press the **[# Enter]** key.**

To cancel deleting a Sample Print file, press the **[Escape]** key.

- 5 Press the **[# Enter]** key to delete the file.**

The message **[Deleted]** appears.

- 6 Press the **[Online]** key.**

The initial screen appears.

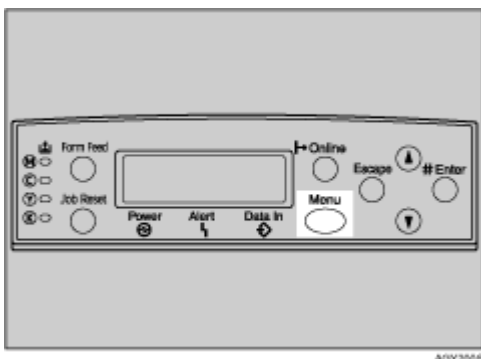
Checking the Error Log

When a print job is not saved on the hard disk, it remains in the error log and can be checked using the control panel.

★ Important

- ❑ The latest 50 error files are stored in the error log. If a new error file is added when there are 50 error files already stored, the oldest file is deleted. However, if the oldest error file is a sample print file, it is not deleted, but stored instead in the sample print error log until the number of sample print error files reaches 20.
- ❑ If you turn off the power, the logs will be deleted.

1 Press the [Menu] key.



The [Menu] screen appears.

2 Press the [▲] or [▼] key to display [Sample Print], and then press the [# Enter] key.

The user ID and the time when the job was stored appear.

3 Press the [▲] or [▼] key to display [Error File(s)], and then press the [# Enter] key.

4 Press the [▲] or [▼] key to check the log.

To print error files, either print or delete the file saved on the hard disk, and then print the file from the computer again.

5 When you finish checking the error log, press the [Escape] key.

The Sample Print job selection screen appears.

6 Press the [Online] key.

The initial screen appears.

Locked Print

Use this function to print confidential documents. Documents will not be printed automatically unless a password is entered using the control panel.

★ Important

- ❑ To use this function, the optional hard disk must be installed on the printer.
- ❑ The number of pages the printer can save varies depending on the print image content. At most, the printer can store 30 jobs or 1,100 pages for Sample Print and Locked Print. At most, the printer can store a maximum of 1,000 pages for a single job.
- ❑ If you turn off the power, the job saved on the hard disk will be deleted.
- ❑ Locked Print files will not appear on the display panel if they have already been printed or deleted using Web Image Monitor before you select [**Locked Print**] using the control panel.
- ❑ Locked Print files printed or deleted using Web Image Monitor after you have selected [**Locked Print**] using the control panel will still appear on the display panel. However, an error message will appear if you try to print or delete those Locked Print files.
- ❑ Print jobs are not saved on the hard disk in the following cases. You can check the error log for jobs not saved.
 - When there are 30 Sample Print and Locked Print jobs saved on the hard disk.
 - When the total number of pages saved on the hard disk exceeds 1,000 pages.

↓ Note

- ❑ You can identify the file you want to print by the user ID and the time when the job was stored.
- ❑ After the Locked Print file is printed, the job in the printer is deleted automatically.
- ❑ Follow the procedure below to use this function with the PCL or RPCS printer driver under Windows. If you want to use this function under Mac OS, see [p.260 "Using PostScript 3"](#).

☰ Reference

For details about settings for the printer driver, see the printer driver Help.

Files specified for Locked Print can be printed or deleted using Web Image Monitor. For details, see Web Image Monitor Help.

Sending Print Job to the Printer

- 1** From an application, select a command to print.

The [Print] dialog box appears.

2 Select the printer you want to use in the [Name] list, and then click [Properties].

3 In the [Job type:] box, click [Locked Print].

4 In the [User ID:] box, enter a user ID using up to eight alphanumeric characters.

This is used to identify the user. The user ID can be entered using up to eight alphanumeric (a-z, A-Z, 0-9) characters.

5 In the [Password:] box, enter a four to eight digit password (0-9).

6 Execute a command to print.

The job is saved on the hard disk.

7 Enter the password using the control panel, and then specify whether to print or delete the job.

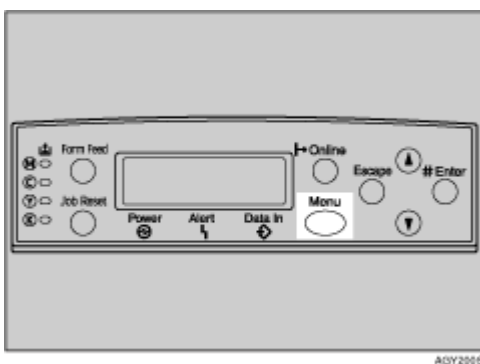
Reference

[p.107 "Entering a Password".](#)

[p.108 "Deleting a Locked Print File".](#)

Entering a Password

1 Press the [Menu] key.



The [Menu] screen appears.

2 Press the [▲] or [▼] key to display [Locked Print], and then press the [# Enter] key.

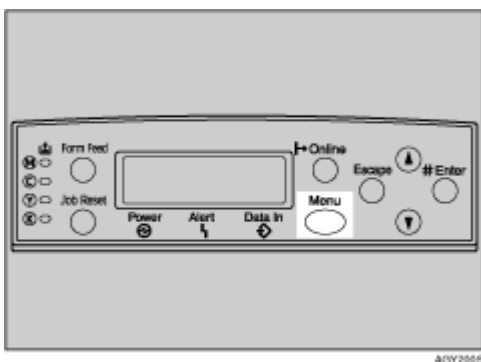
The user ID and the time when the job was stored appear.

3 Press the [▲] or [▼] key to display the file you want to print, and then press the [# Enter] key.

- 4** Enter the password. Press the [▲] or [▼] key to enter the leftmost digit of the password, and then press the [# Enter] key.
- 5** The next digit appears.
- 6** Repeat steps to enter all the digits of the password, and then press the [# Enter] key.
- 7** Check that [Print File] is displayed, and then press the [# Enter] key.
To cancel printing, press the [Escape] key.
- 8** Press the [# Enter] key.
After the job is printed, the job saved on the hard disk is deleted.

Deleting a Locked Print File

- 1** Press the [Menu] key.



The [Menu] screen appears.

- 2** Press the [▲] or [▼] key to display [Locked Print], and then press the [# Enter] key.
- 3** Press the [▲] or [▼] key to display the file you want to delete.
- 4** Enter the password of the Locked Print file. Press the [▲] or [▼] key to enter the leftmost digit of the password, and then press the [# Enter] key.
- 5** The next digit appears.
- 6** Repeat step to enter all the digits of the password, and then press the [# Enter] key.
- 7** Press the [▲] or [▼] key to display [Delete File], and then press the [# Enter] key.
To cancel deleting a Locked Print file, press the [Escape] key.

8 Press the [# Enter] key.

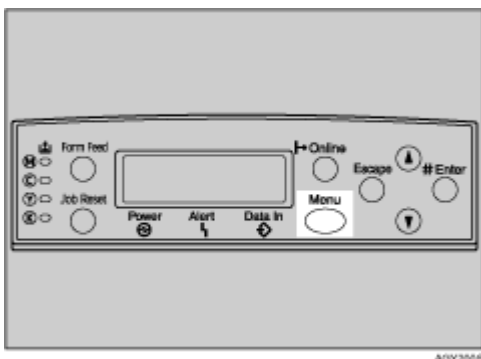
The message **[Deleted]** appears, and then the Locked Print job selection screen appears.

Checking the Error Log

When a print job is not saved on the hard disk, it remains in the error log and can be checked using the control panel.

★ Important

- ❑ The latest 50 error files are stored in the error log. If a new error file is added when there are 50 error files already stored, the oldest file is deleted. However, if the oldest error file is a locked print file, it is not deleted, but stored instead in the locked print error log until the number of locked print error files reaches 20.
- ❑ If you turn off the power, the logs will be deleted.

1 Press the [Menu] key.

The **[Menu]** screen appears.

2 Press the [▲] or [▼] key to display [Locked Print], and then press the [# Enter] key.

The user ID and the time when the job was stored appear.

3 Press the [▲] or [▼] key to display [Error File(s)], and then press the [# Enter] key.**4 Press the [▲] or [▼] key to check the log.**

To print error files, either print or delete the file saved on the hard disk, and then print the file from the computer again.

5 When you finish checking the error log, press the [Escape] key.

The Locked Print job selection screen appears.

6 Press the [Online] key.

The initial screen appears.

Form Feed

The message is displayed when there is no paper in the paper that does not agrees with the size and form specified by the printer driver, or there is no paper. You can form feed using tray.

1 Press the **[Form Feed]** key, and then select the paper tray on the screen.

2 Press the **[# Enter]** key.

The job is printed from the selected tray.

Canceling a Print Job

You can cancel printing from either the printer or a client computer. Since canceling procedures vary depending on the print job status, check the job status and cancel printing according to the following procedure.

Windows - Canceling a Print Job

★ Important

- ❑ When the printer is connected to multiple computers, be careful not to accidentally cancel other users' print jobs.

If the print job you want to cancel is being printed

1 Check if the print job you want to cancel is currently being printed.

While the print job may not be being printed, the printer is receiving data if the Data In indicator is lit or blinking.

2 Press the [Job Reset] key.

The [Job Reset?] screen appears.

3 Select the current job or all jobs (including the current job) using the [▲] or [▼] key.

It is also possible to annul the cancellation. Printing resumes if you select [Resume Print], and then press the [# Enter] key.

4 Press the [# Enter] key.

A confirmation message appears.

Printing resumes if you press the [Escape] key after the message appears.

5 Press the [# Enter] key.

The job is canceled. When the cancellation procedure is complete, a message appears.

↓ Note

- ❑ A print job that contains a large volume of data may take considerable time to cancel.
- ❑ If printing resumes after being canceled, the period of time set for [I/O Timeout] is too short. Set a longer period of time for [I/O Timeout] on the [Host Interface] menu.

If the print job you want to cancel is not being printed

1 Double-click the printer icon on the Windows task tray.

A window appears showing all print jobs that are currently queuing to be printed. Check the current status of the job you want to cancel.

You can also open the print job queue window by double-clicking the printer icon in the [Printer] window.

2 Select the name of the job you want to cancel.

3 On the [Document] menu, click [Cancel Printing].



- ☐ When this printer is used as a network printer, other users' print jobs cannot be canceled from a client computer.
- ☐ Clicking [Purge Print Documents] on the [Printer] menu deletes all currently queued print jobs. However, when this printer is used as a network printer, print jobs from other users' computer cannot be canceled from a client computer.
- ☐ When the print job you selected starts printing, it takes some time before the print job disappears from the printer window.

Mac OS - Canceling a Print Job

★ Important

- ☐ When the printer is connected to multiple computers, be careful not to accidentally cancel other users' print jobs.

If the print job you want to cancel is being printed

1 Check if the print job you want to cancel is currently being printed.

While the print job may not be being printed, the printer is receiving data if the Data In indicator is lit or blinking.

2 Press the [Job Reset] key.

[Job Reset?] screen appears.

3 Select the current job or all jobs (including the current job) using the [▲] or [▼] key.

It is also possible to annul the cancellation. Printing resumes if you select [Resume Print], and then press [# Enter] key.

4 Press the [# Enter] key.

A confirmation message appears.

Printing resumes if you press the **[Escape]** key after the message appears.

5 Press the [# Enter] key.

The job is canceled. When the cancellation procedure is complete, a message appears.



- ☐ A print job that contains a large volume of data may take considerable time to cancel.
- ☐ If printing resumes after being canceled, the period of time set for **[I/O Timeout]** is too short. Set a longer period of time for **[I/O Timeout]** on the **[Host Interface]** menu.

If the print job you want to cancel is not being printed

1 Double-click the printer icon on the desktop.

A window appears showing all print jobs that are currently queuing to be printed. Check the current status of the job you want to cancel.

Under Mac OS X, start Print Center.

2 Select the name of the job you want to cancel.

3 Click the pause icon, and then click the trash icon.



- ☐ When this printer is used as a network printer, other users' print jobs cannot be canceled from a client computer.

Caution During Printing

Collate

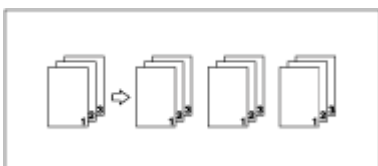
The Collate function allows you to print while sorting printouts into page-ordered sets, such as when printing multiple copies of meeting materials.

Reference

For details about collate and job separation, see the printer driver Help.

❖ Collate

Output can be assembled as sets in sequential order.



★ Important

- ❑ To use these functions, an optional memory unit of at least 256 MB or the optional hard disk drive must be installed on the printer.
- ❑ Up to 150 pages can be sorted using RAM. If the optional hard disk drive is installed, up to 1,000 pages can be sorted.

Spool Printing

With Spool Printing, the print data is saved in the hard disk before printing. To use this function, set it from the menu. See [p.202 “spoolsw”](#).

★ Important

- ❑ Do not turn off the printer or the computer when a print job is being spooled and the **Data In** indicator is blinking. The print job will remain in the hard disk and be printed when the printer is turned on. The setting can be changed using the “spoolsw clear job” command on the telnet
- ❑ The Spool Printing function is available when the optional hard disk is installed.
- ❑ The Spool Printing function is available for data received using diprint, lpr, ipp, ftp, and smb.
- ❑ When using diprint, the Spool Printing function cannot be used with bidirectional communication.
- ❑ The domain reserved for spool printing is about 1 GB.
- ❑ When Spool Printing is on, the size of a single print job cannot exceed 500 MB.

- ❑ When sending print jobs spooled from several computers, up to one dprint job, 10 lpr jobs, one ipp job, one ftp job, and one smb job can be spooled. Jobs exceeding this spooling capacity cannot be executed. It is necessary to wait to add new jobs.

↓ Note

- ❑ First page takes longer to print when using spool printing.
- ❑ With Spool Printing, the computer is freed from print processing earlier, even when processing a large amount of data.
- ❑ Spool jobs stored in the printer can be viewed or deleted using Web Image Monitor.

📖 Reference

For information about the “spoolsw clear job” command on the telnet, see [p.202 “spoolsw”](#).

Setting Spool Printing

Spool printing settings can be made using telnet or Web Image Monitor.

- Using Web Image Monitor
In **[System]** on the **[Configuration]** menu, click **[Enable]** in **[Spool Printing]**.
For details, see Web Image Monitor Help.
- Using telnet
Enter “spoolsw spool on”.
For details, see [p.202 “spoolsw”](#).

Checking or deleting spooled jobs using Web Image Monitor

Follow the procedure below to check or delete spooled jobs using Web Image Monitor.

- 1** Open a Web browser.
- 2** Enter “[http://\(printer's address\)/](#)” in the address bar to access the printer whose settings you want to change.
Top Page of Web Image Monitor appears.
- 3** Click **[Login]**.
The dialog box for entering the user name and password appears.
- 4** Enter the user name and password, and then click **[OK]**.
Contact your network administrator for information about the settings.
- 5** In the menu area, click **[Job]**.
A submenu will appear.
- 6** On the **[Printer]** menu, click **[Spool Printing]**.
A list of spooled jobs appears.

- 7** To delete a job, select the check box of the job you want to delete, and then click [Delete].

The selected job is deleted.

- 8** Quit Web Image Monitor.



For details, see Web Image Monitor Help.

Cover

Using this function, you can insert cover and back sheets fed from a different tray to that of the main paper, and print on them.



To use this function, Collate must be set. Rotating Collate can not be set.



- ☐ The cover sheets should be the same size and orientation as the body of the paper.
- ☐ If Auto Tray Select is set as the paper feed tray for the body paper, the paper will be delivered from a tray containing paper from a tray containing paper in the portrait direction. Therefore, if the cover paper is set to landscape orientation, the orientation cover and body will be different.



For printing methods, see the printer driver Help.

Memory Capacity and Paper Size

Additional memory apart from standard memory may be required depending on the paper size and data type.



- ☐ When printing from bypass tray, duplex printing will not be supported regardless of the memory capacity, and only one-side will be printed.

One-sided printing (600 x 600 dpi)

❖ 128 MB (standard)

- A5, B5 JIS, A4, Letter, and Legal sized paper printing is guaranteed.

One-sided printing (1200 x 600 dpi)

❖ 128 MB (standard)

- A5 and B5 JIS sized paper printing is guaranteed.

- A4, Letter and Legal sized paper can be printed.

❖ **256 MB (standard + 128 MB)**

- A5, B5 JIS, A4, Letter, and Legal sized paper printing is guaranteed.

One-sided printing (1200 x 1200 dpi)

❖ **128 MB (standard)**

- Printing is not possible.

❖ **256 MB (standard + 128 MB)**

- A5, B5 JIS, A4, Letter, and Legal sized paper printing is guaranteed.

Duplex printing (600 x 600 dpi)

❖ **128 MB (standard)**

- B5 JIS sized paper printing is guaranteed.
- A4, Letter and Legal sized paper can be printed.

❖ **256 MB (standard + 128 MB)**

- B5 JIS, A4, Letter, and Legal sized paper printing is guaranteed.

Duplex printing (1200 x 600 dpi)

❖ **128 MB (standard)**

- Printing is not possible.

❖ **256 MB (standard + 128 MB)**

- A5, B5 JIS, A4, Letter, and Legal sized paper printing is guaranteed.

Duplex printing (1200 x 1200 dpi)

❖ **128 MB (standard)**

- Printing is not possible

❖ **256 MB (standard + 128 MB)**

- B5 JIS sized paper printing is guaranteed.
- A4, Letter and Legal sized paper can be printed.

❖ **384 MB (standard + 256 MB)**

- A5, B5 JIS, A4, Letter, and Legal sized paper printing is guaranteed.



- ❑ To duplex print at 1200 x 1200 dpi, the optional SDRAM module must be installed. High density images cannot be printed if the SDRAM module is not installed.

Menu Chart

This section explains how to change the default settings of the printer and provides information about the parameters included in each menu.

❖ Sample Print



- ☐ Appear only when the optional hard disk is installed.
- ☐ For details, see [p.102 “Sample Print”](#).

❖ Locked Print



- ☐ Appear only when the optional hard disk is installed.
- ☐ For Details, see [p.106 “Locked Print”](#).

❖ Paper Input

| Menu |
|---------------|
| Bypass Size |
| Paper Type |
| Tray Locking |
| Tray Priority |

❖ List/Test Print

| Menu |
|-----------------|
| Config.P/Er.Log |
| Config. Page |
| Error Log |
| Menu List |
| Color Demo Page |
| PCL Config.Page |
| PS Config. Page |
| PDF Config.Page |
| Hex Dump |

❖ Maintenance

| Menu |
|-----------------|
| Color Regist. |
| Color Calibrate |

| Menu |
|-----------------|
| Image Density |
| Registration |
| Plain Paper |
| Maint. Reset |
| HD Format |
| 4C.Graphic Mode |
| Replacmnt Alert |
| WL.LAN Signal |
| WL.LAN Defaults |
| Image Area |
| Key Repeat |

❖ System

| Menu |
|-----------------|
| Prt. Err Report |
| Auto Continue |
| Memory Overflow |
| Copies |
| Printer Lang. |
| Sub Paper Size |
| Page Size |
| Def.Print Lang. |
| Duplex |
| Blank Pages |
| Energy Saver 1 |
| Energy Saver 2 |
| Auto Reset Time |
| Unit of Measure |
| B&W Page Detect |
| Spool Printing |
| Letterhead Mode |
| Bypass Priority |
| RAM Disk |
| Notify by Email |



- ☐ **[Spool Printing]** appear when the optional hard disk is installed.
- ☐ **[RAM Disk]** will not appear when the optional hard disk is installed.

❖ Host Interface

| Menu |
|-----------------|
| I/O Buffer |
| I/O Timeout |
| Network Setup |
| IEEE 1394 Setup |
| IEEE 802.11b |



- ☐ **[IEEE 1394 Setup]** appears when the optional IEEE 1394 interface board is installed.
- ☐ **[IEEE 802.11b]** appears when the optional IEEE 802.11b interface unit is installed.

❖ PCL Menu

| Menu |
|-----------------|
| Orientation |
| Form Lines |
| Font Source |
| Font Number |
| Point Size |
| Font Pitch |
| Symbol Set |
| Courier Font |
| Ext. A4 Width |
| Append CR to LF |
| Resolution |

❖ PS Menu

| Menu |
|---------------|
| Data Format |
| Resolution |
| Color Setting |
| Color Profile |

❖ PDF Menu

| Menu |
|----------------|
| PDF: Change PW |
| PDF Group PW |
| Resolution |
| Color Setting |
| Color Profile |

❖ Language

| Menu |
|------------|
| English |
| German |
| French |
| Italian |
| Dutch |
| Swedish |
| Norwegian |
| Danish |
| Spanish |
| Finnish |
| Portuguese |
| Czech |
| Polish |
| Hungarian |

Paper Input Menu

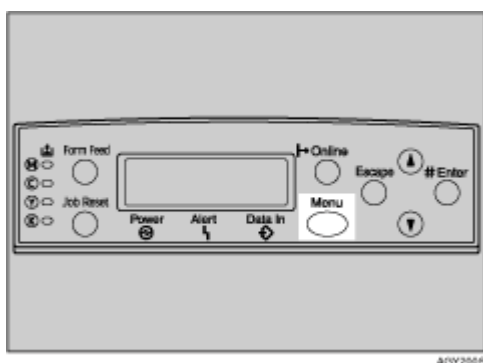
This section explains about paper settings on the Paper Input menu such as paper sizes and types on each tray.

Changing the paper input menu

Tray locking

Follow the procedure below to lock/unlock trays.

- 1 Press the [Menu] key.**



The [Menu] screen appears.

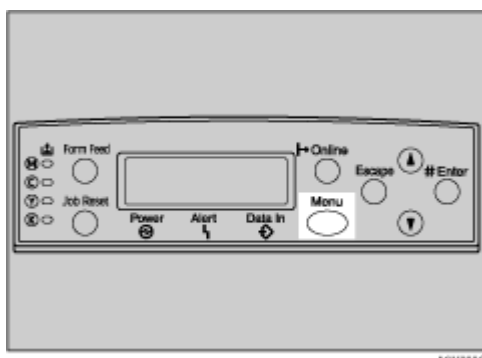
- 2 Press the [▲] or [▼] key to display [Paper Input], and then press the [# Enter] key.**
- 3 Press the [▲] or [▼] key to display [Tray Locking], and then press the [# Enter] key.**
- 4 Press the [▲] or [▼] key to display the tray to unlock, and then press the [# Enter] key.**
- 5 Press the [▲] or [▼] key to display [Off], and then press the [# Enter] key.**
Wait for two seconds. The [Tray Locking] screen appears.
- 6 Press the [Online] key.**

The initial screen appears.

Tray priority

Follow the procedure below to change the tray priority.

1 Press the [Menu] key.



The [Menu] screen appears.

2 Press the [▲] or [▼] key to display [Paper Input], and then press the [# Enter] key.

3 Press the [▲] or [▼] key to display [Tray Priority], and then press the [# Enter] key.

4 Press the [▲] or [▼] key to select a tray you want to use.

5 Press the [# Enter] key.

Wait for two seconds. The [Paper Input] screen appears.

6 Press the [Online] key.

The initial screen appears.

Paper input menu parameters

This section explains about parameters that can be set on the Paper Input menu.

❖ Bypass Size

You can specify the paper size for Bypass tray.

- 8 1/2 x 14, 8 1/2 x 11, 5 1/2 x 8 1/2, 7 1/4 x 10 1/2, 8 x 13, 8 1/2 x 13, 8 1/4 x 13, A4 (210 x 297), B5 JIS(182x257), A5 (148 x 210), A6 (105 x 148), 16K (195 x 267), 4 1/8 x 9 1/2, 3 7/8 x 7 1/2, C5 Env(162x229), C6 Env(114x162), DL Env(110x220), Custom Size.



☐ Default:

- Metric version: A4 (210 x 297)
- Inch version: 8 1/2 x 11

☐ JIS stands for “Japanese Industrial Standard”.

❖ Paper Type

If you use various types of paper, select the paper type for Tray 1, Tray 2, Tray 3 or Bypass Tray.

For details about the type of paper loaded in each tray, see Maintenance Guide.

❖ Tray 1

Plain Paper, Recycled Paper, Special Paper, Color Paper, Letterhead, Preprinted, Bond Paper

❖ Tray 2

Plain Paper, Recycled Paper, Special Paper, Color Paper, Letterhead, Preprinted, Bond Paper

❖ Tray 3

Plain Paper, Recycled Paper, Special Paper, Color Paper, Letterhead, Preprinted, Bond Paper

❖ Bypass Tray

Plain Paper, Recycled Paper, Special Paper, Color Paper, Letterhead, Preprinted, Labels, Bond Paper, Cardstock, Cardstock, Thick Paper 1, Thick Paper 2, Glossy Paper



☐ Default :Plain Paper

☐ Only the installed trays appear on the display panel.

❖ Tray Locking

If you use various types of paper, you can lock a tray to prevent printing on different types of paper such as letterhead or colored paper. When **[Auto Select]** is selected in **[Paper Source]** from the printer driver, the locked tray is not used. You can select each tray set to on or off.



☐ Default :Off

☐ When using custom size paper, if **[On]** is selected in **[Tray Locking]**, the size selected on the control panel has priority, if **[Off]** is selected, the size selected from the printer driver has priority.

☐ Only installed trays appear on the display panel.

☐ You can lock multiple trays.

☐ If you need to have a tray locked, you must select the tray using both printer driver and control panel.

☐ When a locked tray is selected from the printer driver, the printer does not search for another tray.

❖ Tray Priority

You can set a tray to be checked first when **[Auto Tray Select]** is selected in **[Paper Source]** from the printer driver. The tray selected here is used when no tray is selected for a print job.



- ☐ Default :Tray 1
- ☐ Only installed trays appear on the display panel.
- ☐ It is recommended that you load paper of the size and orientation you use most frequently in the tray selected in **[Tray Priority]**.

List/Test Print Menu

You can print lists of configurations on printer or the paper printings.
Also, you can check the types and characters of all the printable fonts.

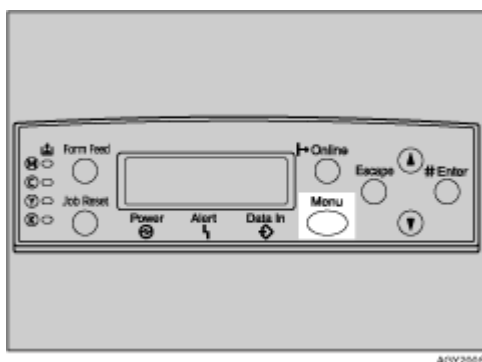
Printing a Configuration Page

Follow the procedure below to print the configuration page.

★ Important

- ❑ The configuration page is printed on A4 or Letter (8 1/2 x 11) size paper, so load them in the same paper tray.

1 Press the [Menu] key.



The [Menu] screen appears.

2 Press the [▼] or [▲] key to display [List/Test Print], and then press the [# Enter] key.

3 Press the [▼] or [▲] key to display [Config. Page], and then press the [# Enter] key.

The configuration page is printed. The test print menu screen returns on completion of printing.

4 Press the [Online] key.

The initial screen appears.

Interpreting the configuration page

❖ System Reference

❖ Printer ID

The serial number assigned to the board by its manufacturer is displayed.

❖ **Pages Printed**

The total number of pages printed by the printer to date is displayed.

❖ **Total Memory**

The total amount of SDRAM installed on the printer is displayed.

❖ **Firmware Version**

- **Firmware**
The version number of the printer controller firmware is displayed.
- **Engine**
The version number of the printer engine firmware is displayed.
- **NCS**
The version number of the network interface board is displayed.

❖ **Controller Option**

The items are displayed when the controller options are installed.

❖ **Printer Language**

The version number of the printer language is displayed.

❖ **Options**

The options installed are displayed.

❖ **Paper Input**

Settings made on the **[Paper Input]** menu are displayed.



For details, see [p.125 “Paper input menu parameters”](#).

❖ **Maintenance**

Settings made on the **[Maintenance]** menu are displayed.



For details, see [p.132 “Maintenance Menu”](#).

❖ **System**

Settings made on the **[System]** menu are displayed.



For more information, see [p.138 “System Menu”](#).

❖ **PCL Menu**

Settings made on the **[PCL Menu]** are displayed.



For details, see [p.152 “PCL Menu”](#).

❖ **PS Menu**

Settings made on the **[PS Menu]** are displayed.



For details, see [p.155 “PS Menu”](#).

❖ **PDF Menu**

Settings made on the **[PDF Menu]** are displayed.



For details, see [p.157 “PDF Menu”](#).

❖ **Host Interface**

Settings made on the **[Host Interface]** menu are displayed.

When DHCP is active on the network, the IP address, subnet mask and gateway address appear in parentheses on the configuration page.



For details, see [p.145 “Host Interface Menu”](#).

❖ **Interface Information**

Interface information is displayed.

List/Test Print menu parameters

This section explains about parameters that can be set on the List/Test Print menu.

❖ **Config.P/Er.Log**

You can print the configuration page and error log.

❖ **Config. Page**

You can print the current configuration of the printer.

❖ **Error Log**

You can print an error report.

❖ **Menu List**

You can print a menu list showing all available menus.

❖ **Color Demo Page**

You can print a Color Demo Page.

❖ **PCL Config.Page**

You can print the current PCL configuration.

❖ **PS Config. Page**

You can print an installed PS font and the Disk Directory List which shows the optional hard disk.

❖ **PDF Config.Page**

You can print an installed PS3 font and the Disk Directory List which shows the optional hard disk.

❖ **Hex Dump**

You can print the data sent by the computer using Hex Dump.

Maintenance Menu

You can set printing conditions such as density and calibration, and printer management such as formatting the optional hard disk unit.

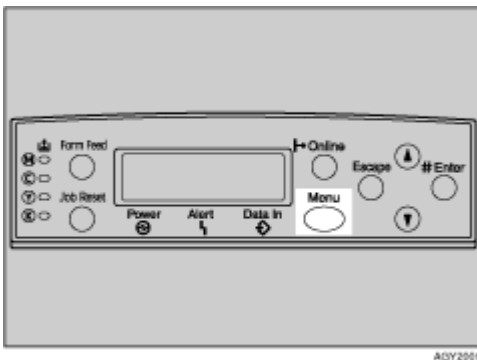
Changing the maintenance menu

This section explains changing the maintenance menu using examples.

HD Format

Follow the procedure below to format the optional hard disk unit after initial set-up.

- 1 Press the [Menu] key.**



The [Menu] screen appears.

- 2 Press the [▼] or [▲] key to display [Maintenance], and then press the [# Enter] key.**
- 3 Press the [▼] or [▲] key to display [HD Format], and then press the [# Enter] key.**
- 4 Read the HD format confirmation message, and then press the [# Enter] key to start formatting.**

The optional hard disk unit is formatted, and the rebooting message appears.

- 5 Turn off the printer's power. After a few seconds, turn the power on again.**

The optional hard disk unit is now formatted and ready to use.s

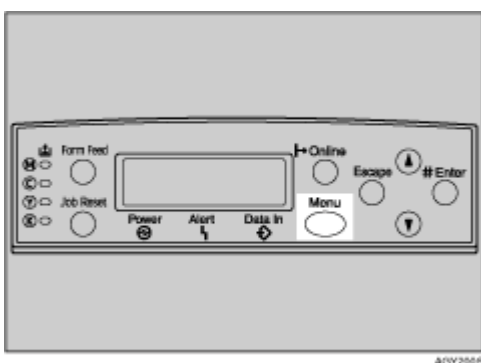
↓ Note

- ❑ If the **[HD Format]** button is not displayed, the optional hard disk unit is not properly installed. Reinstall the optional hard disk unit. For details about the optional hard disk unit, see Setup Guide. If you cannot install it properly even after attempting reinstallation, contact your sales or service representative.

Displaying the signal strength

Follow the procedure below to check the IEEE 802.11b (wireless LAN) signal on the **[Maintenance]** menu.

1 Press the **[Menu]** key.



The **[Menu]** screen appears.

2 Press the **[▼]** or **[▲]** key to display **[Maintenance]**, and then press the **[# Enter]** key.

3 Press the **[▼]** or **[▲]** key to display **[WL.LAN Signal]**, and then press the **[# Enter]** key.

Check the display for result.

4 Press the **[Escape]** key.

The initial screen appears.

↓ Note

- ❑ If **[WL.LAN Signal]** is not displayed, **[IEEE 802.11b]** has not been selected for **[LAN Type]** in **[Network Setup]** on the **[Host Interface]** menu. Select **[IEEE 802.11b]** for **[LAN Type]**, and then check that **[WL.LAN Signal]** is displayed on the **[Maintenance]** menu again.
- ❑ Signal status can be measured in **[Infrastructure]** under **[Comm. Mode]** of the wireless LAN. If **[Ad hoc]** or **[802.11Ad hoc]** is selected in **[Comm. Mode]**, signal status cannot be measured. To measure signal status, select **[Comm. Mode]** in **[Infrastructure]** under **[IEEE 802.11b]** on the **[Host Interface]** menu.
- ❑ Every time you press the **[# Enter]** key, the signal is updated.

- ☐ The signal is rated **[Good]** if signal strength is 86%-100%, **[Fair]** if 61%-85%, **[Poor]** if 31%-60%, and **[Unavailable]** if 0%-30%. If the signal is unstable or unavailable, remove any obstructions or move the printer to a place to receive the signal.
- ☐ Using wireless devices or microwave sources nearby will affect the signal transmission.

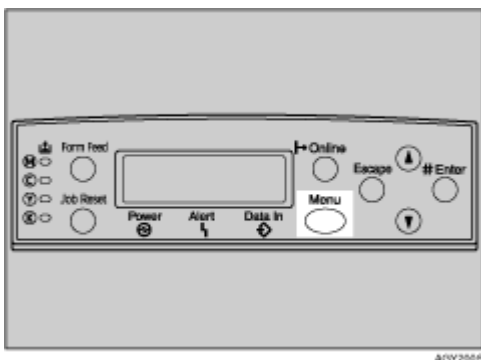
Resetting the IEEE 802.11b (Wireless LAN) Settings

Follow the procedure below to reset the wireless LAN setting on the **[Maintenance]** menu.

★ Important

- ☐ **[Comm. Mode]**, **[Channel]**, **[Trans. Speed]**, **[WEP Setting]**, and **[SSID]** can be selected on the **[Host Interface]** menu.

1 Press the **[Menu]** key.



The **[Menu]** screen appears.

2 Press the **[▼]** or **[▲]** key to display **[Maintenance]**, and then press the **[# Enter]** key.

3 Press the **[▼]** or **[▲]** key to display **[WL.LAN Defaults]**, and then press the **[# Enter]** key.

4 Press the **[# Enter]** key.

The wireless LAN setting is reset.

After about three seconds, the initial screen appears.

Maintenance menu parameters

This section explains about parameters that can be set on the Maintenance menu.

❖ Color Regist.

You can specify Auto Adjust or Fuser Adjust for this feature.

❖ **Color Calibrate**

You can adjust the gradation of bright (highlighted parts) and medium areas (middle parts) for printing.

❖ **Start Calibr. 1**

You can print gradation correction sheet 1.

❖ **Start Calibr. 2**

You can print gradation correction sheet 2.

❖ **Reset**

You can reset the gradation correction value to default.



For details, see “Correcting the Color Gradation”, Maintenance Guide.

❖ **Image Density**

You can select the print image density.

❖ **Prt. Test Sheet**

You can print the image density test sheet.

❖ **Black, Cyan, Magenta, Yellow**

-10 to 10

❖ **Reset**

Reset the image density value to default.



For details, see “Adjusting the Image Density”, Maintenance Guide.

❖ **Registration**

You can adjust the starting position of the printing page.

❖ **Prt. Test Sheet**

You can print the registration test sheet.

- Tray 2
- Tray 3
- Duplex.BackSide



☐ Only the installed trays appear on the display panel.

❖ **Adjustment**

You can select the start position for printing on a page.

- Horiz: Tray 2
- Horiz: Tray 3
- Horiz:Dup.Back



- ☐ Only the installed trays appear on the display panel.

❖ Plain Paper

You can specify plain paper for each tray.

- Tray 1
- Tray 2
- Tray 3
- Bypass Tray



- ☐ Default: Normal

❖ Maint. Reset

Maintenance Reset allows the user to reset the counters of each internal unit, such as the Transfer Belt and Fusing Unit. These counters can be reset at anytime, but must be reset when a unit is reinstalled.

For details about resetting internal units, see "Replacing Consumables", Maintenance Guide.

❖ HD Format

You can format the hard disk when the optional hard disk is installed.



For details about formatting the hard disk, see "Attaching Printer Hard Disk Type 3000", Setup Guide.

❖ 4C.Graphic Mode

This mode adjusts levels of toner color overlap. If characters or lines blur, selecting **[Text Priority]** may make them clearer. Select **[Photo Priority]** for normal use.



- ☐ Default: Photo Priority

❖ Replacmnt Alert

Use this function to specify when to warn the user about replacing supplies.

- Notify Sooner
- Normal
- Notify Later



- ☐ Default: Normal

❖ WL.LAN Signal

You can check the signal strength when using wireless LAN.

 **Reference**

For details about displaying the signal strength, see [p.133 “Displaying the signal strength”](#).

❖ **WL.LAN Defaults**

Reset the wireless LAN to default. The menu appears when the 802.11b interface unit is installed.

❖ **Image Area**

You can extend the printable area by about 2.5 mm (0.01 inch).

- Do not enlarge
- Enlarge

 **Note**

☐ Default: Do not enlarge

❖ **Key Repeat**

Holding down **[On]** allows users to scroll through items and settings. Pressing **[Off]** moves through items and settings one at a time.

 **Note**

☐ Default: On

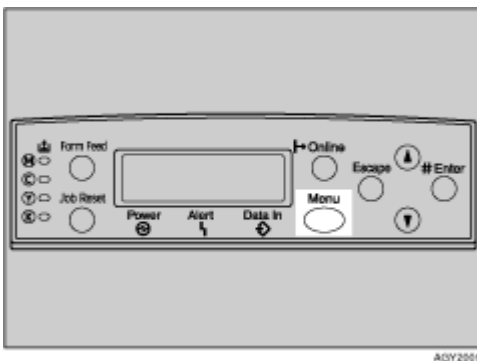
System Menu

You can set basic functions required to use the printer. The printer can be used on factory default, but the configuration can be changed depending on the condition of the user. The changed condition holds even if the printer is turned off.

Changing the system menu

Follow the procedure below to change the settings for Energy Saver Timer.

- 1** Press the [Menu] key.



The [Menu] screen appears.

- 2** Press [▲] or [▼] key to display [System], and then press the [# Enter] key.
- 3** Press [▲] or [▼] key to display [Energy Saver], and then press the [# Enter] key.
- 4** Press the [▲] or [▼] key to display [E. Saver Timer], and then enter [# Enter] Key
- 5** Press [▲] or [▼] key to select the lead time needed to switch to the Energy Saver mode.
- 6** Press the [# Enter] key.

Wait for two seconds. The [Energy Saver] screen appears.

- 7** Press the [Online] key.

The initial screen appears.

System menu parameters

This section explains about parameters that can be set on the System menu.

❖ **Prt. Err Report**

You can select **[On]** or **[Off]** to have an error report printed when a printer error or memory error occurs.

- Off
- On



☐ Default: Off

❖ **Auto Continue**

You can make the Auto Continue setting. When set to on, printing continues after a system error occurs.

- Off
- Immediate
- 1 minute
- 5 minutes
- 10 minutes
- 15 minutes



☐ Default: Off

- ☐ When set to on and certain errors occur, the current job may be canceled, and the printer automatically perform the next queued job.

❖ **Memory Overflow**

You can specify whether or not to print a memory overflow error report.

- Do not print
- Error Info.



☐ Default: Do not print

❖ **Copies**

You can specify the number of pages to print.

This setting is disabled if the number of pages to print is specified by command or the printer driver.

- 1-999

❖ **Printer Lang.**

You can specify the printer language.

- Auto Detect
- PCL
- PS
- PDF



☐ Default: Auto Detect

❖ Sub Paper Size

You can select **[Off]** or **[Auto]** to enable the Sub Paper Size function. When you select **[Auto]**, the printer uses an alternative paper size if the currently specified paper is not loaded. When you select **[Off]**, the printer uses any size paper in the current specified paper tray.

- Off
- Auto



☐ Default: Off

❖ Page Size

You can specify the default paper size.

8 1/2 x 14, 8 1/2 x 11, 5 1/2 x 8 1/2, 7 1/4 x 10 1/2, 8 x 13, 8 1/2 x 13, 8 1/4 x 13, A4 (210 x 297), B5 JIS(182x257), A5 (148 x 210), A6 (105 x 148), 16K (195 x 267), 4 1/8 x 9 1/2, 3 7/8 x 7 1/2, C5 Env(162x229), C6 Env(114x162), DL Env(110x220), Custom Size.



☐ Default:

- Metric version: A4 (210 x 297)
- Inch version: 8 1/2 x 11

☐ The initial paper size is applied when the paper size is not specified in the print data.

❖ Def.Print Lang.

You can specify the initial printer language if the machine cannot detect the printer language.

- PCL
- PS
- PDF



☐ Default: PCL

❖ Duplex

You can specify whether or not to print on both sides of a sheet.

- Off
- Short Edge Bind
- Long Edge Bind



- ☐ Default: Off
- ☐ This menu appears only when the optional duplex unit is installed.

❖ Blank Pages

You can specify whether or not to print blank pages.

- Do not print
- Print



- ☐ Default: Print

❖ Energy Saver 1

You can set On/Off for Energy Saver mode level 1. This is the preheat mode.

- On
- Off



- ☐ Default: On
- ☐ When the printer switches to Energy Saver mode, the **Power** indicator is unlit, but the **Online** indicator remains lit.

❖ Energy Saver 2

You can specify the number of minutes Energy Saver mode is applied.

❖ E.Saver On/Off

You can specify whether or not to switch E. Saver.

- On
- Off



- ☐ Default: On
- ☐ When the printer switches to Energy Saver mode, the **Power** indicator is unlit, but the **Online** indicator remains lit.

❖ E. Saver Timer

You can select the lead time needed to switch to the Energy Saver mode. The Energy Saver mode reduces electric power consumption.

- 1 minute
- 5 minutes
- 15 minutes
- 30 minutes
- 45 minutes
- 60 minutes



- ☐ Default: 1 minute
- ☐ When the printer switches to the Energy Saver mode, the Power indicator goes off, while the Online indicator stays lit and **[Energy Save Mode]** appears.

❖ **Auto Reset Time**

You can set On or Off and the time for the Auto Reset Timer.

❖ **Auto Reset**

- On
- Off



- ☐ Default: On

❖ **Set Time**

- 10 to 999sec by 1sec.

❖ **Unit of Measure**

You can specify the unit of measurement in “mm” or “inch” for the custom paper size.

- mm
- inch



- ☐ Default value is destination dependant.

❖ **B&W Page Detect**

Specify whether to recognize black-and-white images. Use the black-and-white recognition function to print all monochrome pages in monochrome mode even if color printing is specified.

- On
- Off



- ☐ Default: On

❖ **Spool Printing**

You can select whether all of the print data is spooled to the hard disk drive before printing.

- Off
- On



- ☐ Default: Off

- ☐ Spooling stores a sent print job temporarily in the printer, and then prints it.
- ☐ This menu appears only when the optional hard disk is installed.

❖ Letterhead Mode

You can select the letterhead printing mode.

- Off
- Auto Detect
- On (Always)



☐ Default: Off

❖ Bypass Priority

When the different paper size or type is specified from the driver, you can specify which setting is given priority to, machine setting or command.

- Machine
- Driver/Command



☐ Default: Driver/Command

❖ RAM Disk

If the optional hard disk is not installed for PDF Direct Print, select a value of 2 MB or higher.

This menu appears only when the optional hard disk is not installed.

- 0 MB
- 2 MB
- 4 MB
- 8 MB
- 16 MB



☐ Default: 4 MB



- ☐ When the amount of SDRAM is small and RAM Disk is set to 16 MB, printing may not be possible depending on the print job and duplex printing may be canceled. If this happens, increase the amount of SDRAM, or set RAM Disk to 8 MB or less.



For details about the optional SDRAM module, see Setup Guide.

❖ Notify by Email

You can specify whether or not to send an error message to a preset e-mail address when an error occurs in the printer.

- Off
- On



- ☐ After changing the setting, turn off the power of the printer briefly, and then turn it on again.



- ☐ Default: On



For information, see Web Image Monitor Help.

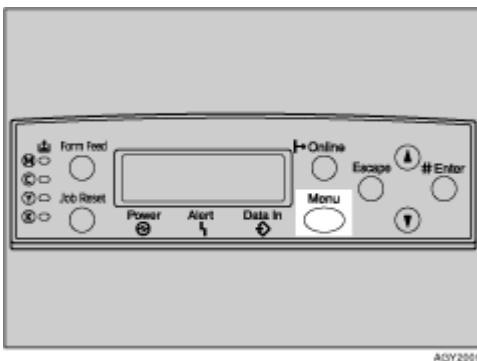
Host Interface Menu

You can set configurations about network connections and communication when using parallel connection between the printer and the computer. The changed configuration holds even if the printer is turned off.

Changing the Host Interface menu

Follow the procedure below to change the I/O Timeout.

- 1** Press the [Menu] key.



The [Menu] screen appears.

- 2** Press the [▲] or [▼] key to display [Host Interface], and then press the [# Enter] key.
- 3** Press the [▲] or [▼] key to display [I/O Timeout], and then press the [# Enter] key.
- 4** Press the [▲] or [▼] key to select the lead time needed to end a printing operation, and then press the [# Enter] key.

Wait for two seconds. The [Host Interface] menu appears.

- 5** Press the [Online] key.

The initial screen appears.

Host Interface menu parameters

This section explains parameters that can be set on the Host Interface menu.

❖ I/O Buffer

You can select the size of I/O Buffer. Normally it is not necessary to change this setting.

- 128 KB

- 256 KB
- 512 KB



☐ Default: 128 KB

❖ I/O Timeout

You can set how many seconds the printer should wait before ending a print job. If printing operation is frequently interrupted by data from other ports, you can increase the timeout period.

- 10 seconds
- 15 seconds
- 20 seconds
- 25 seconds
- 60 seconds



☐ Default: 15 seconds

❖ Network Setup

You can make network-related settings.



For details, see “Configuration”, Setup Guide.

❖ DHCP

You can select [On] or [Off] to use DHCP with TCP/IP.

- On
- Off



☐ Default: On

❖ IP Address

You can specify the IP address.



☐ When DHCP is set to on, the IP address cannot be changed. To change it, set DHCP to off. Contact your network administrator for information about the network configuration.



☐ Default: 011.022.033.044

❖ Subnet Mask

You can specify the subnet mask.

 **Important**

- ☐ When DHCP is set to on, the subnet mask cannot be changed. To change it, set DHCP to off. Contact your network administrator for information about the network configuration.

 **Note**

- ☐ Default: 000.000.000.000

❖ **Gateway Address**

You can specify the gateway address.

 **Important**

- ☐ When DHCP is set to on, the gateway address cannot be changed. To change it, set DHCP to off. Contact your network administrator for information about the network configuration.

 **Note**

- ☐ Default: 000.000.000.000

❖ **Frame Type (NW)**

You can select the frame type for NetWare.

- Auto Select
- Ethernet II
- Ethernet 802.2
- Ethernet 802.3
- Ethernet SNAP

 **Note**

- ☐ Default: Auto Select

❖ **Active Protocol**

You can select the active protocol.

- TCP/IP
- NetWare
- SMB
- AppleTalk

 **Note**

- ☐ Default: All Active

❖ **Ethernet Speed**

You can select the network speed to operate the printer.

- Auto Select
- 10Mbps Half D.
- 10Mbps Full D.

- 100Mbps Half D.
- 100Mbps Full D.



☐ Default: Auto Select

❖ LAN Type

You can select Ethernet or IEEE 802.11b for LAN Type.

This menu appears only when the optional 802.11 interface unit is installed.

- Ethernet
- IEEE 802.11b



☐ Default: Ethernet

❖ IEEE 1394 Setup

You can make settings for IEEE 1394. This menu appears only when the optional IEEE 1394 board is installed.



For details about IEEE 1394 Setup, see Setup Guide.

❖ DHCP

You can select **[On]** or **[Off]** to use TCP/IP with DHCP.

- On
- Off



☐ Default: On

❖ IP Address1394

You can specify the IP address for IEEE 1394 (IP over 1394).



☐ Default: 011.022.033.044

☐ When using both Ethernet and IP over 1394 simultaneously, do not specify the IP address used for Ethernet.

❖ Subnet Mask1394

You can specify the subnet mask for IEEE 1394 (IP over 1394).



☐ Default: 000.000.000.000

☐ When using both Ethernet and IP over 1394 simultaneously, do not specify the subnet mask used for Ethernet.

❖ **IP over 1394**

You can specify whether or not to activate IP over 1394.

- Active
- Not Active



☐ Default: Active

❖ **SCSI print**

You can specify whether or not to activate SCSI print.

- Active
- Not Active



☐ Default: Active

❖ **Bidi-SCSI print**

You can specify whether or not to activate bidirectional communication for SCSI print.

- On
- Off



☐ Default: On

❖ **IEEE 802.11b**

You can make settings for wireless LAN. This menu appears only when the optional 802.11b interface unit is installed.

❖ **Comm. Mode**

You can select the transmission mode for IEEE 802.11b.

- 802.11 Ad hoc
- Infrastructure
- Ad hoc



☐ Default: 802.11 Ad hoc

☐ Comm. Mode can also be set using a Web Image Monitor. For details, see Web Image Monitor Help.

❖ **Channel**

You can select channels: 1-13 (metric version)/1-11 (inch version).



☐ Default: 13 (metric version)/11 (inch version)

❖ Trans. Speed

You can select the transmission speed for IEEE 802.11b.

- Auto
- 11 Mbps
- 5.5 Mbps
- 2 Mbps
- 1 Mbps



- ☐ Default: Auto

❖ SSID

You can set an SSID in the infrastructure mode and the 802.11 Ad hoc mode.

Select **[View]** to check the SSID. Select **[Enter ID]** to set SSID.

- View
- Enter ID



- ☐ Select **[?]** to enter **[/]** for the SSID. Also, **[¥]** appears when printing the configuration page, read it as **[/]**.



- ☐ Default: blank (ASSID)
- ☐ Characters used are ASCII 0x20-0x7e (32 bytes).
- ☐ An SSID is set automatically to the nearest access point if no SSID has been set.
- ☐ If no SSID has been set for the 802.11 ad hoc mode, an SSID is set automatically and the same SSID is used for the 802.11 ad hoc mode and the infrastructure mode.
- ☐ If blank is specified in SSID for 802.11b adhoc mode or adhoc mode, "ASSID" appears.
- ☐ An SSID can also be set using Web Image Monitor. For details, see Web Image Monitor Help.

❖ WEP Setting

You can specify whether or not to activate WEP settings.

- Active
- Not Active



- ☐ Default: Not Active
- ☐ The WEP key can be entered using a hexadecimal number or an ASCII character sequence.

- ☐ When using 64 bit WEP, up to 10 hexadecimal or 5 ASCII characters can be entered. When using 128 bit WEP, up to 26 hexadecimal or 13 ASCII characters can be entered.
- ☐ The WEP key can also be set using Web Image Monitor. For details, see Web Image Monitor Help.

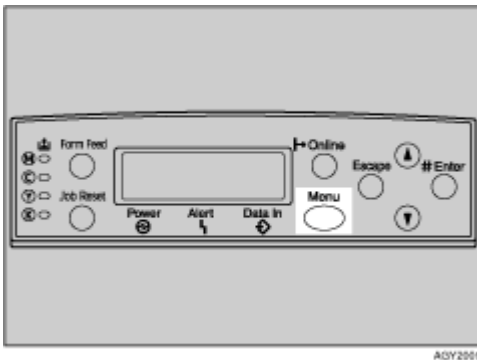
PCL Menu

You can set conditions when using PCL for printing.

Changing the PCL menu

Follow the procedure below to change the setting for Orientation.

1 Press the [Menu] key.



The [Menu] screen appears.

2 Press the [▲] or [▼] key to display [PCL Menu], and then press the [# Enter] key.

3 Press the [▲] or [▼] key to display [Orientation] screen, and then press the [# Enter] key.

4 Press the [▲] or [▼] key to select the orientation, and then press the [# Enter] key.

Wait for two seconds. The [PCL Menu] screen appears.

5 Press the [Online] key.

The initial screen appears.

PCL menu parameters

This section explains about parameters that can be set on the PCL menu.

❖ Orientation

You can select the page orientation.

- Portrait
- Landscape



☐ Default: Portrait

❖ Form Lines

You can specify the number of lines per page between 5 and 128.



☐ Default:

- Metric version: 60
- Inch version: 64

❖ Font Source

You can set the location of the default font.

- Resident
- RAM
- HDD
- SD



☐ Default: Resident

☐ When you select **[RAM]**, you can select only fonts downloaded to the printer RAM.

☐ When you select **[HDD]**, you can select only fonts downloaded to the optional hard disk.

❖ Font Number

You can specify the ID of the default font you want to use.

- 0 to 50 (Internal)
- 1 to 50 (Download)

❖ Point Size

You can specify the point size you want to use for the default font between 4 and 999.75 in 0.25 increments.



☐ Default: 12.00 points

☐ This setting is effective only for a variable-space font.

❖ Font Pitch

You can specify the number of characters per inch you want to use for the default font between 0.44 and 99.99 in 0.01 increments.



☐ Default: 10.00 pitch

☐ This setting is effective only for fixed-space fonts.

❖ Symbol Set

You can specify the character set for the default font. Available sets are as follows:

Roman-8, ISO L1, ISO L2, ISO L5, PC-8, PC-8 D/N, PC-850, PC-852, PC8-TK, Win L1, Win L2, Win L5, Desktop, PS Text, VN Intl, VN US, MS Publ, Math-8, PS Math, VN Math, Pifont, Legal, ISO 4, ISO 6, ISO 11, ISO 15, ISO 17, ISO 21, ISO 60, ISO 69, Win 3.0



☐ Default: PC-8

❖ Courier Font

You can select a courier-type font.

- Regular
- Dark



☐ Default: Regular

❖ Ext. A4 Width

You can extend the width of the printable area of A4 sheets reducing side margin width.

- Off
- On



☐ Default: Off

❖ Append CR to LF

You can specify whether or not to append a CR code to each LF code to print text data clearly.

- Off
- On



☐ Default: Off

❖ Resolution

You can specify the print resolution in dots per inch.

- 300 dpi
- 600 dpi



☐ Default: 600 dpi

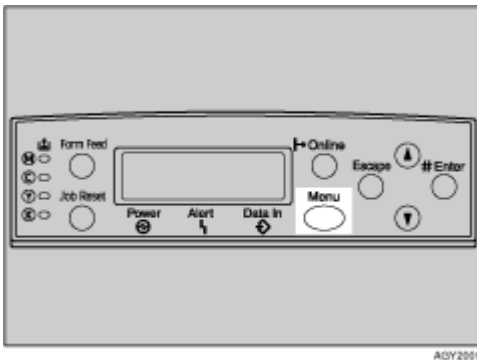
PS Menu

You can set conditions when using Postscript for printing.

Changing the PS menu

Follow the procedure below to change the setting for data format.

1 Press the [Menu] key.



The [Menu] screen appears.

2 Press the [▲] or [▼] key to display [PS Menu], and then press the [# Enter] key.

3 Press the [▲] or [▼] key to display [Data Format], and then press the [# Enter] key.

4 Press the [▲] or [▼] key to select [TBCP], and then press the [# Enter] key.

Wait for two seconds. The [PS Menu] screen appears.

5 Press the [Online] key.

The initial screen appears.

PS menu parameters

This section explains about parameters that can be set on the Postscript menu.

❖ Data Format

You can select the data format.

- Binary Data
- TBCP

This setting is effective when using a parallel, USB, or EtherTalk connection.

When you use a parallel or USB connection, the print job is canceled if binary data is sent from the printer driver.

When you use an Ethernet connection, the print job is canceled if:

- The printer driver data format is TBCP and the data format selected using the control panel is Binary Data.
- The printer driver data format is binary and the data format selected using the control panel is TBCP.



☐ Default: Binary Data

❖ Resolution

You can select the resolution.

- 600dpi Fast
- 600dpi Std.
- 1200dpi



☐ Default: 600dpi Fast

❖ Color Setting

You can make an RGB setting.

- None
- Fine
- Super Fine



☐ Default: Super Fine

❖ Color Profile

You can select the color profile.

- Auto
- Solid Color
- Presentation
- Photographic
- User Setting



☐ Default: Auto

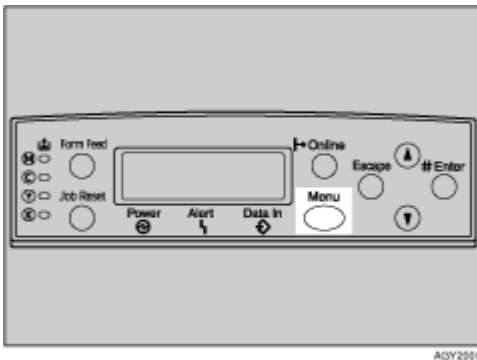
PDF Menu

You can set conditions when using PDF printing.

Changing the PDF menu

Follow the procedure below to change the resolution setting.

- 1 Press [Menu] key.**



The [Menu] screen appears.

- 2 Press [▲] or [▼] key to display [PDF Menu], and then press the [# Enter] key.**
- 3 Press [▲] or [▼] key to display [Resolution], and then press the [# Enter] key.**
- 4 Press [▲] or [▼] key to select the resolution, and then press the [# Enter] key.**

Wait for two seconds. The [PDF Menu] screen appears.

- 5 Press the [Online] key.**

The initial screen appears.

PDF menu parameters

This section explains about parameters that can be set on the PDF menu.

❖ PDF: Change PW

You can specify the password for the PDF file executing PDF Direct Print.

- Current PW

★ Important

- ☐ The password can be set using Web Image Monitor, but must be sent through the network. For increased security, use this menu on the control panel to set the password directly.

↓ Note

- ☐ Default: no password set

❖ **PDF Group PW**

You can set a group password specified using DeskTopBinder Lite.

↓ Note

- ☐ When you use a group password, the optional data protection unit must be installed.
- Current PW

★ Important

- ☐ The password can be set using Web Image Monitor, but must be sent through the network. For increased security, use this menu on the control panel to set the password directly.

↓ Note

- ☐ Default: no password set

❖ **Resolution**

You can select the resolution for the PDF file executing PDF Direct Print.

- 600dpi Fast
- 600dpi Std.
- 1200dpi

↓ Note

- ☐ Default: 600dpi Fast

❖ **Color Setting**

You can make an RGB setting for the PDF file executing PDF Direct Print.

- None
- Fine
- Super Fine

↓ Note

- ☐ Default: Super Fine

❖ **Color Profile**

You can select the color profile for the PDF file executing PDF Direct Print.

- Auto
- Solid Color

- Presentation
- Photographic
- User Setting



☐ Default: Auto

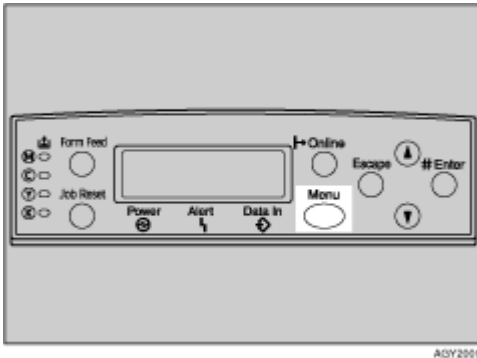
Language Menu

You can set language displayed on the menu.

Changing the language menu

Follow the procedure below to change the language.

- 1 Press the [Menu] key.**



The [Menu] screen appears.

- 2 Press the [▲] or [▼] key to display [Language], and then press the [# Enter] key.**

- 3 Press the [▲] or [▼] key to select the language, and then press the [# Enter] key.**

Wait for two seconds. The [Menu] screen appears.

- 4 Press the [Online] key.**

The initial screen appears.

Language menu parameters

You can select the language you use. Available languages are as follows:

English, German, French, Italian, Dutch, Swedish, Norwegian, Danish, Spanish, Finnish, Portuguese, Czech, Polish, and Hungarian.

↓ Note

- ☐ Default: English

Using Web Image Monitor

Using Web Image Monitor, you can check the printer status and change settings.

❖ Available operations

The following operations can be remotely performed using Web Image Monitor from a client computer.

- Displaying printer status or settings
- Checking the print job status or history
- Interrupting currently printing jobs
- Resetting the printer
- Managing the Address Book
- Making printer settings
- Making e-mail notification settings
- Making network protocol settings
- Making security settings

❖ Configuring the printer

To perform the operations from Web Image Monitor, TCP/IP is required. After the printer is configured to use TCP/IP, operations from Web Image Monitor become available.

❖ Recommended Web browser

- Windows:
Internet Explorer 5.5 or higher
Netscape Navigator 7.0 or higher
- Mac OS 8.1 or higher:
Netscape Navigator 7.0 or higher
Safari 1.0 or higher



- ☐ To use Netscape Navigator with Secured Sockets Layer (SSL: an encryption protocol), use Netscape Navigator 7.0 or higher.
- ☐ If the previous versions of the Web browser above are used or JavaScript and cookies are not enabled with the Web browser used, display and operation problems may occur.
- ☐ If you are using a proxy server, change the Web browser settings. Contact your network administrator for information about the settings.
- ☐ The previous page may not appear even after the back button of a Web browser is clicked. If this happens, click the refresh button of a Web browser.
- ☐ Updating the printer information is not automatically performed. Click **[Refresh]** in the display area to update the printer information.

Displaying Top Page

This section explains the Top Page and how to display Web Image Monitor.

1 Start your Web browser.

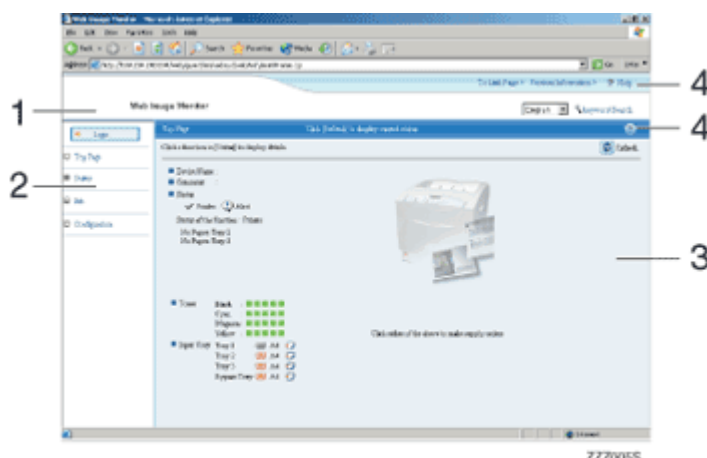
2 Enter “http://(printer's address)” in the address bar of a Web browser.

Top Page of Web Image Monitor appears.



- ☐ If the printer's host name has been registered on the DNS or WINS server, you can enter it. For details, see [p.279 “Using DHCP”](#).
- ☐ When setting SSL, a protocol for encrypted communication, under environment which server authentication is issued, enter “https://(printer's address)”.

Every Web Image Monitor page is divided into the following areas:



1. Header area

The link to help and dialog box for keyword search appears.

2. Menu area

The dialog box for switching to the user mode and administrator mode appears, and each mode's menu will be displayed.

If you select menu, it's content will be shown on the work area, or the sub area.

3. Display area

Displays the contents of the item selected in the menu area.

Printer information in the display area is not automatically updated. Click **[Refresh]** at the upper right in the display area to update the printer information. Click the Web browser's **[Refresh]** button to refresh the entire browser screen.

Printer status, network interface board names, and comments are displayed.

4. Help

Use Help to view or download Help file contents.

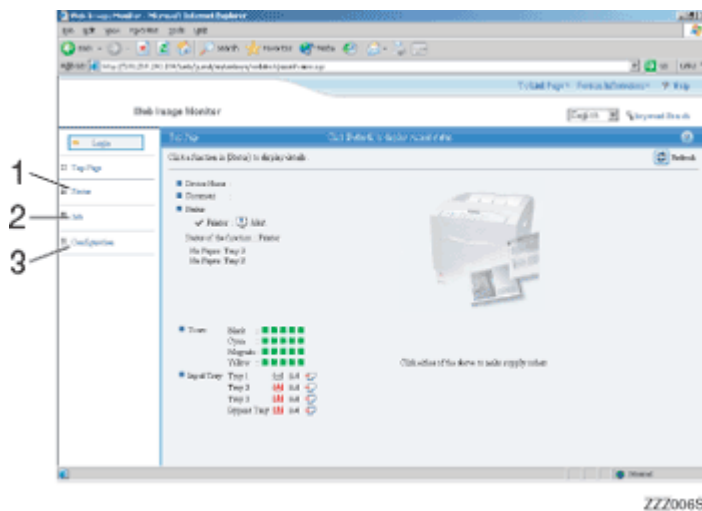
About Menu and Mode

There are two modes available with Web Image Monitor: user mode and administrator mode.

Displayed items may differ depending on the printers.

❖ About User Mode

In the user mode, printer status, settings, and print job status can be viewed, but the printer settings cannot be changed.



1. Status

Printer status, including the amount of remaining paper in paper trays and the amount of remaining toner, is displayed.

2. Job

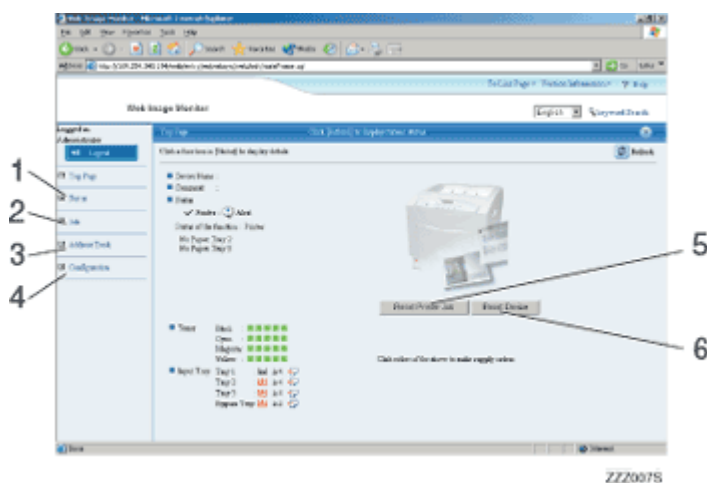
Allows you to display list of Spooled Print Job, Job History, Error Log, Locked Print, and Sample Print Jobs. This also perform or delete Locked Print and Sample Print Job.

3. Configuration

Display current printer and network settings, and download help files.

❖ Administrator Mode

In the administrator mode, you can configure various printer settings.



1. Status

Printer status, including the amount of remaining paper in paper trays and the amount of remaining toner, is displayed.

2. Job

Allows you to display list of Spooled Print Job, Job History, Error Log, Sample Print and Locked Print. This also allows you to delete Spooled Print Job, Sample Print and Locked Print jobs.

3. Address Book

User information can be registered, displayed, changed, and deleted.

4. Configuration

Make system settings for the printer, interface settings, and security.

5. Reset Printer Job

Click to reset current print jobs and print jobs in queue. This button is located on Top Page.

6. Reset Device

Click to reset the printer. If a print job is being processed, the printer will be reset after the print job is completed. This button is located on Top Page.

Access in the Administrator Mode

Follow the procedure below to access Web Image Monitor in the administrator mode.

1 On Top Page, click [Login].

The dialog box for entering the user name and password appears.

2 Enter your user name and password, and then click [OK].

Contact your network administrator for information about the settings.

Displaying Web Image Monitor Help

When using Help for the first time, clicking either **[Help]** in the header area or the icon marked “?” in the display area makes the following screen appear, in which you can view Help in two different ways, as shown below:

❖ Viewing Help on our Web site

Downloading Help to your computer

❖ Downloading and Checking Help

You can download Help to your computer. As the Help URL, you can specify the path to the local file to view the Help without connecting to the Internet.



- ☐ By clicking **[Help]** in the header area, the contents of Help appear.
- ☐ By clicking “?”, the Help icon in the display area, Help for the setting items in the display area appears.

Downloading Help

- 1** In the [OS] list, select the operating system.
- 2** In the [Language] list, select the language.
- 3** Click [Download].
- 4** Download Help by following the instructions on the screen.
- 5** Store the downloaded compressed file in a location, and then decompress the file.

To view the downloaded Web Image Monitor Help, set the path to the location of the decompressed file.

Linking the URL of the Help File to the [Help] Button.

You can link the URL of the help file on a computer or Web server to the **[Help]** button.

- 1** Log on to Web Image Monitor in the administrator mode.
- 2** In the menu area, click [Configuration].
- 3** Click [Webpage].
- 4** In the [Help URL] box, enter the URL of the help file.

If you saved the help file to “C:HELPEEN”, enter “file:///C:/HELP/”. For example, if you saved the file to a Web server, and the URL of the index file is “http://a.b.c.d/HELP/EN/index.html”, enter “http://a.b.c.d/HELP/”.

5 Click [Apply].

Using SmartDeviceMonitor for Admin

Using SmartDeviceMonitor for Admin, you can monitor the network printers. Also, you can change the configuration of the network interface board using TCP/IP or IPX/SPX.

❖ Protocol stack provided with Operating System

- Windows 95/98/Me
TCP/IP
IPX/SPX
NetWare
NetWare Client32 for Windows 95
IntraNetWare Client for Windows 95
Novell Client for Windows 95/98/Me
- Windows 2000
TCP/IP
IPX/SPX
NetWare
Novell Client for Windows NT/2000/XP
- Windows Server 2003
TCP/IP
IPX/SPX
- Windows XP
TCP/IP
IPX/SPX
Novell Client for Windows NT/2000/XP
- Windows NT 4.0
TCP/IP
IPX/SPX
Client Service for NetWare
NetWare Client32 for Windows NT
IntraNetWare Client for Windows NT
Novell Client for Windows NT/2000/XP

❖ Available operations

The following functions are available:

- Printer Information function
 - Display the network settings and detailed information of the printer.
 - Display the number of pages printed under each User Code.
 - Display the status of print jobs sent from computers.
 - Change the printer network settings.
- Device Settings function

- Lock some of the setting items on the control panel so that they cannot be changed using the control panel.
- Select type of paper loaded in the paper trays.
- Energy Saver function
 - Enable or disable the Energy Saver mode.
- System Status function
 - Display the information such as when paper is depleted during printing on a computer.
- Groups function
 - Monitor multiple printers at the same time. When there are multiple printers to manage, you can create groups and classify the printers to facilitate management.
 - You can customize printer status according to groups, and send status notification e-mail to a computer.

Installing SmartDeviceMonitor for Admin

Follow the procedure below to install SmartDeviceMonitor for Admin.

1 Quit all applications currently running.

2 Insert the CD-ROM into the CD-ROM drive.

The installer starts.



- ☐ Auto Run may not work under certain operating system settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

3 Select an interface language, and then click [OK].

The default interface language is English.

4 Click [SmartDeviceMonitor for Client / Admin] installation, and then click [Next].

5 The software license agreement appears in the [License Agreement] dialog box.

After reading through its contents, click **[I accept the agreement]** if you agree, and then click **[Next >]**.

6 Follow the instructions on the screen.

A message appears when the installation is complete.

7 Click [OK].

 Note

- ☐ If you are required to restart the computer after installing SmartDeviceMonitor for Admin, restart the computer and continue the configuration.
- ☐ SmartDeviceMonitor for Client supports following languages: Czech, Danish, German, English, Spanish, French, Italian, Hungarian, Dutch, Norwegian, Polish, Portuguese, Finnish, Swedish, Chinese Simple and Chinese Traditional.

Changing the Network Interface Board Configuration

Follow the procedure below to change the network interface board configuration using SmartDeviceMonitor for Admin.

1 Start SmartDeviceMonitor for Admin.

2 On the [Group] menu, point to [Search Device], and then click [TCP/IP], [IPX/SPX] or [TCP/IP(SNMPv3)]. A list of printers using the selected protocol appears.

 Note

- ☐ Select the protocol of the printer whose configuration you want to change.

3 In the list, select a printer whose configuration you want to change.

4 On the [Tools] menu, click [NIB Setup Tool].

A Web browser opens and the dialog box for entering the user name and password for the Web Image Monitor administrator appears.

Enter your user name and password. Contact your network administrator for information about the settings.

NIB Setup Tool starts when the network interface board is default. Follow the instruction on the screen.

5 Enter required setting items.

Configure settings using Web Image Monitor. For details, see [p.161 “Using Web Image Monitor”](#).

6 Quit Web Image Monitor.

7 Quit SmartDeviceMonitor for Admin.

Locking the Menus on the Printer's Control Panel

Follow the procedure below to lock the menus on the printer's control panel.

1 Start SmartDeviceMonitor for Admin.

- 2** On the [Group] menu, point to [Search Device], and then click [TCP/IP], [IPX/SPX] or [TCP/IP(SNMPv3)].

A list of printers using the selected protocol appears.



- ☐ Select the protocol of the printer whose configuration you want to change.

- 3** Select a printer.

- 4** On the [Tools] menu, point to [Device Settings], and then click [Protect Printer Operation Panel].

A Web browser opens and the dialog box for entering the password for the Web Image Monitor administrator appears.

- 5** Enter the user name and password, and then click [OK].

Contact your network administrator for information about the settings.

The [System] page of Web Image Monitor appears.

- 6** Select [Level 1] or [Level 2] in the [Lock Operation Panel Menu] list.

- 7** Click [Apply].

- 8** Quit Web Image Monitor.



For details about setting items, see Help in the [General Settings] on [Configuration] page.

Changing the Paper Type

Follow the procedure below to change the paper type.

- 1** Start SmartDeviceMonitor for Admin.

- 2** On the [Group] menu, point to [Search Device], and then click [TCP/IP], [IPX/SPX] or [TCP/IP(SNMPv3)].

A list of printers using the selected protocol appears.



- ☐ Select the protocol of the printer whose configuration you want to change.

- 3** In the list, select a printer whose configuration you want to change.

- 4** On the [Tools] menu, point to [Device Settings], and then click [Select Paper Type].

A Web browser opens and the dialog box for entering the password for the Web Image Monitor administrator appears.

5 Enter the user name and password, and then click [OK].

Contact your network administrator for information about the settings.

The [Paper] page appears.

6 Select a paper type in the [Paper Type] list for each tray.

7 Click [Apply].

8 Quit Web Image Monitor.



For details about setting items, see Help in the [General Settings] on [Configuration] page.

Managing User Information

Follow the procedure below to manage the user's information using SmartDeviceMonitor for Admin.

Prints jobs can be managed and functions restricted by User Codes.

Starting User Management Tool

Follow the procedure below to start User Management Tool.

1 Start SmartDeviceMonitor for Admin.

2 On the [Group] menu, point to [Search Device], and then click [TCP/IP], [IPX/SPX] or [TCP/IP(SNMPv3)].

A list of printers using the selected protocol appears.



- ☐ Select the protocol of the printer whose configuration you want to change.

3 In the list, select a printer you want to manage.

4 On the [Tools] menu, click [User Management Tool].

The dialog box for entering the user name and password appears.

5 Enter the user name and password, and then click [OK].

Contact your network administrator for information about the settings.

User Management Tool starts.



For details about User Management Tool, see SmartDeviceMonitor for Admin Help.

Displaying the Number of Sheets Printed

Follow the procedure below to display the number of sheets printed under each User Code.

- 1 Start SmartDeviceMonitor for Admin.**
- 2 Click the [User Page Count] tab of User Management Tool.**
The number of pages printed under each User Code appears.
- 3 Click [Finish] on the [File] menu to quit User Management Tool.**

Exporting the information about the number of pages printed

Follow the procedure below to export the information of the number of pages printed under each User Code as a ".csv" file.

- 1 Start SmartDeviceMonitor for Admin.**
- 2 Click the [User Page Count] tab of User Management Tool.**
- 3 On the [File] menu, click [Export User Statics List].**
- 4 Specify the save location and file name, and then click [Save].**
- 5 Click [Finish] on the [File] menu to quit User Management Tool.**

Resetting the number of pages printed to 0.

Follow the procedure below to reset the number of pages printed under each User Code to 0.

- 1 Start SmartDeviceMonitor for Admin .**
- 2 Click the [User Page Count] tab of User Management Tool.**
- 3 Click the user whose information you want to reset.**
- 4 On the [Edit] menu, click [Reset User Counters].**
- 5 Select the check box of the items you want to reset, and then click [OK].**
A confirmation message appears.
- 6 Click [Yes].**
The number of pages printed is reset to 0.
- 7 On the [Edit] menu, click [Apply Settings].**
Changes are applied to information on the [User Page Count] tab.
- 8 Click [Finish] on the [File] menu to quit User Management Tool.**

Restricting Functions

Follow the procedure below to restrict use of individual functions.

- 1 Start SmartDeviceMonitor for Admin.**
- 2 On the [Edit] menu of User Management Tool, click [Restrict Access To Device].**
- 3 Select the check box of the functions you want to restrict.**
- 4 Click [OK].**

A confirmation message appears.
- 5 Click [Yes].**

The settings are applied.

Setting Applicable Functions to New Users

Follow the procedure below to add new users and set functions applicable to them.

- 1 Start SmartDeviceMonitor for Admin.**
- 2 Click the [Access Control List] tab of User Management Tool.**
- 3 On the [Edit] menu, click [Add New User].**
- 4 Enter the User Code and user name.**
- 5 Select the check box of the functions applicable to the new user.**



- ☐ If the check boxes are unavailable, there is no restriction to use that function. For details, see SmartDeviceMonitor for Admin Help.

- 6 Click [OK].**

The new user is added.
- 7 On the [Edit] menu, click [Apply Settings].**

The settings are applied.
- 8 Click [Finish] on the [File] menu to quit User Management Tool.**



For details about setting restrictions, see SmartDeviceMonitor for Admin Help.

Configuring the Energy Saver Mode

Follow the procedure below to configure Energy Saver mode.

1 Start SmartDeviceMonitor for Admin.

2 On the [Group] menu, point to [Search Device], and then click [TCP/IP], [IPX/SPX] or [TCP/IP(SNMPv3)].

A list of printers using the selected protocol appears.



☐ Select the protocol of the printer whose configuration you want to change.

3 Select the printer whose settings you want to make.

To make settings for all printers in the selected group, select no printer.

4 On the [Group] menu, point to [Energy Save Mode], point to [Set Individually] to make the settings for only the selected printer or point to [Set By Group] to make the settings for all printers in the selected group, and then click [On] or [Off].

5 Quit SmartDeviceMonitor for Admin.



For details about the setting value for Energy Saver mode, see SmartDeviceMonitor for Admin Help.

Setting a Password

Follow the procedure below to set a password.

1 Start SmartDeviceMonitor for Admin.

2 On the [Group] menu, point to [Search Device], and then click [TCP/IP], [IPX/SPX] or [TCP/IP(SNMPv3)].

A list of printers using the selected protocol appears.

3 In the list, select a printer whose configuration you want to change.

4 On the [Tools] menu, click [NIB Setup Tool].

A Web browser opens and the dialog box for entering the password for the Web Image Monitor administrator appears.

NIB Setup Tool starts when the network interface board is default. Follow the instruction on the screen.

5 Enter the user name and password, and then click [OK].

Contact your network administrator for information about the settings.

Top Page of Web Image Monitor appears.

6 Click [Configuration].

7 Click [Device Settings].

8 Click [Program/Change Administrator].

9 Click [Change].

10 On the [New Password], enter a password.

Enter the same password in [Confirm Password] .

11 Click [OK].

12 Quit Web Image Monitor.

13 Quit SmartDeviceMonitor for Admin.

Checking the Printer Status

Follow the procedure below to check printer status.

1 Start SmartDeviceMonitor for Admin.

2 On the [Group] menu, point to [Search Device], and then click [TCP/IP], [IPX/SPX] or [TCP/IP(SNMPv3)].

The status of printers is indicated by icons in the list.



☐ For details about status icons, see SmartDeviceMonitor for Admin Help.

3 To obtain status details, click the printer in the list, and then click [Open] on the [Device] menu.

The printer status appears in the dialog box.

4 Quit SmartDeviceMonitor for Admin.



☐ For details about items in the dialog box, see SmartDeviceMonitor for Admin Help.

Changing Names and Comments

Follow the procedure below to change the names and comments of the printer.

1 Start SmartDeviceMonitor for Admin.

- 2** On the [Group] menu, point to [Search Device], and then click [TCP/IP], [IPX/SPX] or [TCP/IP(SNMPv3)]. A list of printers using the selected protocol appears.



- ☐ Select the protocol of the printer whose configuration you want to change.

- 3** Select a printer in the list.

- 4** On the [Tools] menu, click [NIB Setup Tool].

A Web browser opens and the dialog box for entering the password for the Web Image Monitor administrator appears.

NIB Setup Tool starts when the network interface board is default. Follow the instruction on the screen.

- 5** Enter the user name and password, and then click [OK].

Top Page of Web Image Monitor appears.

Contact your network administrator for information about the settings.

- 6** Click [Configuration].

- 7** Click [Device Settings].

- 8** On the [System] page, enter the device name in the [Device Name:] box and a comment in the [Comment] box, and click [Apply].

- In the [Device Name:] box, enter a device name on the printer using up to 31 characters.
- In the [Comment] box, enter a comment on the printer using up to 31 characters.

- 9** Click [OK].

- 10** Quit Web Image Monitor.

- 11** Quit SmartDeviceMonitor for Admin.

Using SmartDeviceMonitor for Client

To view the status of printers using SmartDeviceMonitor for Client, configure SmartDeviceMonitor for Client beforehand.

Monitoring Printers

Follow the procedure below to monitor the printer using SmartDeviceMonitor for Client.

1 Start SmartDeviceMonitor for Client.

The SmartDeviceMonitor for Client icon appears in the task tray.

2 Right-click the SmartDeviceMonitor for Client icon, and check that the printer appears on the pop-up menu.

3 Click [Options...] on the pop-up menu if the printer does not appear on the pop-up menu.

The [SmartDeviceMonitor for Client - Options] dialog box appears.

4 Click the printer you want to monitor, and then select the [To Be Monitored] check box in the [Monitoring Information Settings] area.



☐ To display the printer status in the task tray using the SmartDeviceMonitor for Client icon, select the [Displayed on Task Bar] check box.

☐ For details about status icons, see SmartDeviceMonitor for Client Help.

5 Click [OK].

The dialog box closes and the configured printer is monitored.

Checking the Printer Status

Follow the procedure below to check printer status using SmartDeviceMonitor for Client.

1 Start SmartDeviceMonitor for Client.

2 For status details, right-click the SmartDeviceMonitor for Client icon, and then click the printer.

The printer status appears in the dialog box.



☐ For details about items in the dialog box, see SmartDeviceMonitor for Client Help.

When Using IPP with SmartDeviceMonitor for Client

When using IPP with SmartDeviceMonitor for Client, note the following:

- The network printer can only receive one print job from SmartDeviceMonitor for Client at a time. While the network printer is printing, another user cannot access it until the job is finished. In this case, SmartDeviceMonitor for Client tries to access the network printer until the retry interval expires.
- If SmartDeviceMonitor for Client cannot access the network printer and times out, it will stop sending the print job. In this case, you should cancel the paused status from the print queue window. SmartDeviceMonitor for Client will resume access to the network printer. You can delete the print job from the print queue window, but canceling a print job printed by the network printer might cause the next job sent from another user to be incorrectly printed.
- If a print job sent from SmartDeviceMonitor for Client is interrupted and the network printer cancels the job because something went wrong, send the print job again.
- Print jobs sent from another computer do not appear in the print queue window, regardless of protocol.
- If various users send print jobs using SmartDeviceMonitor for Client to network printers, the printing order might not be the same as that in which the jobs were sent.
- An IP address cannot be used for the IPP port name because the IP address is used for the SmartDeviceMonitor for Client port name.
- When setting SSL, a protocol for encrypted communication, under environment which server authentication is issued, enter “https://(printer's address)/”. Internet Explorer must be installed on your computer. Use the highest version. Internet Explorer 6.0 or higher is recommended.
- If the **[Security Alert]** dialog box appears when accessing the printer using IPP to create or configure an IPP port, or when printing, install the certificate. To select the certificate store location when using Certificate Import Wizard, click **[Place all certificates in the following store]**, and then click **[Local Computer]** under **[Trusted Root Certification Authorities]**.

Printer Status Notification by E-Mail

Whenever a paper tray becomes empty or paper is jammed, an e-mail alert is issued to the registered addresses to notify the printer status.

For this notification, you can make the e-mail notification settings.

Notification timing and e-mail content can be set.

- 1 Set [Notify by Email] under the [System] menu to [On] using the control panel.**

The default is [On].



For details, see [p.138 “System Menu”](#).

- 2 Open a Web browser, and then enter “http://(printer's address)/” in the address bar.**

Top Page of Web Image Monitor appears.

When setting SSL, a protocol for encrypted communication, under environment which server authentication is issued , enter “https://(printer's address)/”.

- 3 Click [Login] on Top Page of Web Image Monitor.**

The dialog box for entering the user name and password appears.

- 4 Enter the user name and password, and then click [OK].**

Contact your network administrator for information about the settings.

- 5 In the menu area, click [Configuration].**

- 6 Click [Device Settings], and then click [E-mail].**

- 7 Make the following settings:**

- Items in the Reception column
- Items in the SMTP column
- Items in the POP before SMTP column
- Items in the POP3/IMAP4 column
- Items in the E-mail Reception Port column
- Items in the E-mail Notification column

- 8 Click [Apply].**

Auto E-mail Notification

1 In the menu area, click [Auto E-mail Notification].

The dialog box for making notification settings appears.

2 Make the following settings:

- Notification Messages
 - Items in the Groups to Notify column
 - Items in the Select Groups/Items to Notify column
- To make detailed settings for these items, click [Edit] next to [Details of E-mail Notification Settings].

3 Click [Apply].

4 Quit Web Image Monitor.

On-demand E-mail Notification

1 In the menu area, click [On-demand E-mail Notification].

The dialog box for making notification settings appears.

2 Make the following settings:

- Notification Subject
- Items in the Access Restriction to Information Column
- Items in the Receivable E-mail Address/Domain Name Settings Column

3 Click [Apply].

4 Quit Web Image Monitor.

Remote Maintenance by telnet

★ Important

- ❑ Remote Maintenance should be password-protected so that access is allowed to administrators only.
- ❑ The password is the same as the one of Web Image Monitor administrator. When the password is changed using “mshell”, other passwords change also.
- ❑ Some commands cannot be used depending on your printer.

Using telnet

Follow the procedure below to use telnet.

★ Important

- ❑ Only one user at a time can log on to perform remote maintenance.

1 Use the IP address or the host name of the printer to start telnet.

```
% telnet "IP_address"
```

2 Enter your user name and password.

Contact your network administrator for information about the settings.

3 Enter a command.

4 Quit telnet.

```
msh> logout
```

The configuration message about saving the changes appears.

5 Enter “yes” to save the changes, and then press the [# Enter] key.

If you do not want to save the changes, enter “no”, and then press the [# Enter] key. To make further changes, enter “return” at the command line, and then press the [# Enter] key.

↓ Note

- ❑ If the message “Can not write NVRAM information” appears, the changes are not saved. Repeat the procedure above.
- ❑ When the changes are saved, the network interface board is reset automatically with that changes.
- ❑ When the network interface board resets, the print job in print process will be printed. However, print jobs in queue will be canceled.

access

Use the “access” command to view and configure access control. You can also specify two or more access ranges.

❖ View settings

```
msh> access
```

❖ Configuration

```
msh> access ☆ range "start-address end-address"
```

- ☆ represents a target number between 1 and 5. (Up to five access ranges can be registered and selected.)

Example: to specify accessible IP addresses between 192.168.0.10 and 192.168.0.20:

```
msh> access 1 range 192.168.0.10 192.168.0.20
```

❖ Access control initialization

```
msh> access flush
```

- Use the “flush” command to restore the default settings so that all access ranges become “0.0.0.0”.



- ☐ The access range restricts computers from use of the printer by IP address. If you do not need to restrict printing, make the setting “0.0.0.0”.
- ☐ Valid ranges must be from lower (start address) to higher (end address).
- ☐ Up to five access ranges can be specified. The entry is invalid if the target number is omitted.
- ☐ You cannot access Web Image Monitor from a restricted IP address.

appletalk

Use the “appletalk” command to view and configure Appletalk parameters.

❖ View settings

```
msh> appletalk
```

- [2] means “active” and [0] means “inactive”.
- The default is [2].

❖ Changing PAP timeout configuration

```
msh> appletalk ptimeout value > 0
```

- Timeout value becomes effective.

```
msh> appletalk ptimeout value = 0
```

- Timeout value becomes ineffective.

autonet

Use the “autonet” command to configure AutoNet parameters.

❖ View settings

The following command displays the current AutoNet settings:

```
msh> autonet
```

❖ Configuration

You can configure AutoNet settings.

```
msh> autonet {on|off}
```

- {on} means “active” and {off} means “inactive”.

❖ Current interface priority configuration display

```
msh> autonet priority
```

❖ Interface priority configuration

```
msh> autonet priority "interface_name"
```

- You can give interface's AutoNet parameter priority.
- Priority settings are available when multiple interfaces are installed.
- ip1394 can be specified only when the IEEE 1394 interface is installed.
- wlan can be specified only when the IEEE 802.11b interface is installed.

| Interface name | Interface configured |
|----------------|------------------------|
| ether | Ethernet interface |
| ip1394 | IEEE 1394 interface |
| wlan | IEEE 802.11b interface |

Note

- ☐ If an interface is not selected, the current interface connection settings remain in effect.

Reference

For details about AutoNet, refer to autonet parameters.

btconfig

Use the “btconfig” command to make Bluetooth settings.

❖ View settings

Bluetooth settings are displayed.

```
msh> btconfig
```

❖ **Mode settings**

You can set the Bluetooth operation mode to {private} or {public}.

```
msh> btconfig {private | public}
```

- The default is {public}.

devicename

Use the “devicename” command to display and change the printer name.

❖ **View settings**

```
msh> devicename
```

❖ **Printer name configuration**

```
msh> devicename name "string"
```

- Enter a printer name using up to 31 alphanumeric characters.
- Set single names for each printer.

❖ **Printer name initialization**

```
msh> devicename clearname
```

- Reset the printer name to its default.

dhcp

Use the “dhcp” command to configure DHCP settings.

❖ **View settings**

The following command displays the current DHCP settings.

```
msh> dhcp
```

❖ **Configuration**

You can configure DHCP.

```
msh> dhcp "interface_name" {on|off}
```

- Click {on} to enable DHCP. Click {off} to disable DHCP.
- If the DNS server address and domain name are obtained from DHCP, be sure to click {on}.
- ip1394 can be specified only when the IEEE 1394 interface is installed.
- wlan can be specified only when the IEEE 802.11b interface is installed.

| Interface name | Interface configured |
|----------------|------------------------|
| ether | Ethernet interface |
| ip1394 | IEEE 1394 interface |
| wlan | IEEE 802.11b interface |

❖ **Current interface priority configuration display**

```
msh> dhcp priority
```

❖ **Interface priority configuration**

```
msh> dhcp priority "interface_name"
```

- You can select which interface has DHCP parameter priority.
- Priority settings are available when multiple interfaces are installed.

❖ **DNS server address selection**

```
msh> dhcp dnsaddr {dhcp | static}
```

- Specify whether to obtain the DNS server address from the DHCP server or use the address set by a user.
- To obtain the DNS server address from the DHCP server, specify “dhcp”. To use the address set by a user, specify “static”.

❖ **Domain name selection**

```
msh> dhcp domainname {dhcp | static}
```

- Specify whether to obtain the domain name from the DNS server or use the domain name set by a user.
- To obtain the domain name from the DHCP server, specify “dhcp”. To use the domain name set by a user, specify “static”.

 **Reference**

For details about DHCP functions, see [p.279 “Using DHCP”](#).

For details about setting the DNS server address, see [p.186 “dns”](#).

For details about setting the domain name, see [p.187 “domainname”](#).

diprint

The direct printing port enables direct printing from a network-connected computer.

Use the “diprint” command to change direct printing port settings.

❖ **View settings**

The following command displays the current direct printing port settings:

```
msh> diprint
```

Example output:

```
port 9100
```

```
timeout=300(sec)
```

```
bidirect on
```

- The “Port” specifies the port number of the direct printing port.

- The “bidirect” setting indicates whether the direct printing port is bidirectional or not.

❖ Setting timeout

```
msh> diprint timeout [30~65535]
```

- You can specify the timeout interval to use when the printer is expecting data from the network.
- The default is 300 seconds.

❖ Setting bidirect

```
msh> diprint bidirect {on | off}
```

- You can specify whether the direct printing port is bidirectional or not.

dns

Use the “dns” command to configure or display DNS (Domain Name System) settings.

❖ View settings

The following command displays current DNS settings:

```
msh> dns
```

❖ DNS server configuration

The following command enables or disables the DNS server address:

```
msh> dns “number” server “server address”
```

The following command displays a configuration using the IP address 192.168.15.16 on a DNS 1 server:

```
msh> dns 1 server 192.168.15.16
```

- You can register up to three DNS server numbers.
- You cannot use “255.255.255.255” as the DNS server address.

❖ Dynamic DNS function setting

```
msh> dns “interface_name” ddns {on|off}
```

- You can set the dynamic DNS function “active” or “inactive”.
- {on} means “active” and {off} means “inactive”.
- ip1394 can be specified only when the IEEE 1394 interface is installed.
- wlan can be specified only when the IEEE 802.11b interface is installed.

| Interface name | Interface configured |
|----------------|------------------------|
| ether | Ethernet interface |
| ip1394 | IEEE 1394 interface |
| wlan | IEEE 802.11b interface |

❖ **Specifying the record overlap operation**

```
msh> dns overlap {update|add}
```

- You can specify operations performed when records overlap.
- update
To delete old records and register new records.
- add
To add new records and store the old records.
- When CNAME overlaps, it is always changed, irrespective of settings.

❖ **CNAME registration**

```
msh> dns cname {on|off}
```

- You can specify whether to register CNAME.
- {on} means “active” and {off} means “inactive”.
- The CNAME registered is the default name beginning with rnp. CNAME cannot be changed.

❖ **A records registration**

```
msh> dns arecord {dhcp|own}
```

- {dhcp}
You can specify the method of registering an A record when the dynamic DNS function is enabled and DHCP is used.
- {own}
To register an A record using the printer as the DNS client.
The DNS server address and the domain name already designated are used for the registration.

❖ **Record updating interval settings**

```
msh> dns interval "time"
```

- You can specify the interval after which records are updated when using the dynamic DNS function.
- The updating interval is specified hourly. It can be entered between 1 and 255 hours.
- The default is 24 hours.

domainname

Use the “domainname” command to display or configure the domain name settings.

You can configure the Ethernet interface, IEEE 1394 interface, or IEEE 802.11b interface.

❖ **View settings**

The following command displays the current domain name:

```
msh> domainname
```

❖ **Interface domain configuration**

```
msh> domainname "interface_name"
```

❖ **Setting the Domain Name**

```
msh> domainname "interface_name" name "domain name"
```

- A domain name can be entered using up to 63 alphanumeric characters.
- The Ethernet interface and IEEE 802.11b interface will have the same domain name.
- ip1394 can be specified only when the IEEE 1394 interface is installed.
- wlan can be specified only when the IEEE 802.11b interface is installed.

| Interface | Interface set |
|-----------|------------------------|
| ether | Ethernet interface |
| ip1394 | IEEE 1394 interface |
| wlan | IEEE 802.11b interface |

❖ **Deleting the Domain Name**

```
msh> domainname "interface_name" clear name
```

help

Use the "help" command to display the available command list and the procedures for using those commands.

❖ **Command list display**

```
msh> help
```

❖ **Display of procedure for using commands**

```
msh> help "command_name"
```

hostname

Use the "hostname" command to change the printer name.

❖ **View settings**

```
msh> hostname
```

❖ **Configuration**

```
msh> hostname "interface_name" "printer_name"
```

- Enter the printer name using up to 63 alphanumeric characters.
- You cannot use a printer name starting with “RNP” or “rnp”.
- The Ethernet interface and IEEE 802.11b interface will have the same printer name.
- ip1394 can be specified only when the IEEE 1394 interface is installed.
- wlan can be specified only when the IEEE 802.11b interface is installed.

| Interface name | Interface configured |
|----------------|------------------------|
| ether | Ethernet interface |
| ip1394 | IEEE 1394 interface |
| wlan | IEEE 802.11b interface |

❖ Initializing the printer name for each interface

```
msh>hostname "interface_name" clear "name"
```

ifconfig

Use the “ifconfig” command to configure TCP/IP (IP address, subnet mask, broadcast address, default gateway address) for the printer.

❖ View settings

```
msh> ifconfig
```

❖ Configuration

```
msh> ifconfig "interface_name" "parameter" "address"
```

- If you did not enter an interface name, it is automatically set to the Ethernet interface.
- ip1394 can be specified only when the IEEE 1394 interface is installed.
- wlan can be specified only when the IEEE 802.11b interface is installed.

| Interface name | Interface configured |
|----------------|------------------------|
| ether | Ethernet Interface |
| ip1394 | IEEE 1394 Interface |
| wlan | IEEE 802.11b Interface |

❖ Netmask configuration

```
msh> ifconfig "interface_name" netmask "address"
```

❖ Broadcast address configuration

```
msh> ifconfig "interface_name" broadcast "address"
```

❖ **Changing the Interface**

```
msh> ifconfig "interface" up
```

- You can specify either the Ethernet interface or IEEE 802.11b interface when using the optional IEEE 802.11b interface unit.

You cannot specify the IEEE 1394 interface.

The following explains how to configure an IP address 192.168.15.16 on Ethernet interface.

```
msh> ifconfig ether 192.168.15.16
```

The following explains how to configure a subnet mask 255.255.255.0 on Ethernet interface.

```
msh> ifconfig ether netmask 255.255.255.0
```

 **Note**

- ☐ To get the above addresses, contact your network administrator.
- ☐ Use the default configuration if you cannot obtain setting addresses.
- ☐ The IP address, subnet mask and broadcast address are the same as that for the ethernet interface and IEEE 802.11b interface.
- ☐ When installing the optional 1394 Interface board, set the IP address and subnet mask so that it does not overlap with the ethernet interface or the IEEE 1394 interface.
- ☐ TCP/IP configuration is the same for both Ethernet and IEEE 802.11b interface. If interfaces are changed, the new interface inherits the configuration.
- ☐ Use "0x" as the initial two letters of a hexadecimal address.

info

Use the "info" command to display printer information such as paper tray, output tray, and printer language.

❖ **Printer information display**

```
msh> info
```

 **Reference**

For details about displayed contents, see [p.210 "Getting Printer Information over the Network"](#).

ipp

Use the "ipp" command to configure IPP settings.

❖ **Viewing settings**

The following command displays the current IPP settings:

```
msh> ipp
```

Example output:

```
timeout=900(sec)  
auth basic
```

- The “timeout” setting specifies how many seconds the computer tries to send print jobs when no connection can be made to the network printer.
- The “auth” setting indicates the user authorization mode.

❖ IPP timeout configuration

Specify how many seconds the computer waits before canceling an interrupted print job. The time can be entered between 30 to 65535 seconds.

```
msh> ipp timeout [30 - 65535]
```

❖ IPP user authorization configuration

Use IPP user authorization to restrict users to print with IPP. The default is “off”.

```
msh> ipp auth {basic|digest|off}
```

- User authorization settings are “basic” and “digest”.
- Use “off” to remove a user's authorization.
- If user authorization is specified, register a user name. You can register up to 10 users.

❖ IPP user configuration

Use the following command:

```
msh> ipp user
```

The following message appears:

```
msh> Input user number (1 to 10):
```

Enter the number, user name, and password.

```
msh> IPP user name:user1
```

```
msh> IPP password:*****
```

After configuring the settings, the following message appears:

```
User configuration changed.
```

netware

Use the “netware” command to configure the NetWare settings such as the print server name or file server name.

❖ Netware Printer Server Names

```
msh> netware pname
```

- Enter the NetWare print server name using up to 47 characters.

❖ Netware File Server Names

```
msh> netware fname
```

- Enter the NetWare file server name using up to 47 characters.

❖ Encap type

```
msh> netware encap [802.3/802.2/snap/ethernet2/auto]
```

❖ Remote Printer Number

```
msh> netware rnum
```

❖ Timeout

```
msh> netware timeout
```

❖ Printer server mode

```
msh> netware mode pserver
```

```
msh> netware mode ps
```

❖ Remote printer mode

```
msh> netware mode rprinter
```

```
msh> netware mode rp
```

❖ NDS context name

```
msh> netware context
```

❖ SAP interval

```
msh> netware "sap interval"
```

❖ Setting login mode for file server

```
msh> netware login server
```

❖ Setting login mode for NDS tree

```
msh> netware login tree
```

❖ Setting login mode for NDS tree name

```
msh> netware tree "NDS name"
```

passwd

Use the “passwd” command to change the remote maintenance password.

❖ Changing the Password

```
msh> passwd
```

- Enter the current password.
- Enter the new password.
- Enter the new password once again.



- ☐ Be sure not to forget or lose the password.

- ❑ The password can be entered using up to 32 alphanumeric characters. Passwords are case-sensitive. For example, “R” is not the same as “r”.

prnlog

Use the “prnlog” command to obtain printer log information.

❖ Print logs display

msh> prnlog

- Displays 16 previous print jobs.

msh> prnlog ID Number

- Specify the ID number of the displayed print log information to display additional details about a print job.



- ❑ For details about displayed contents, see [p.210 “Getting Printer Information over the Network”](#).

rendezvous

Use the “rendezvous” command to display rendezvous-related settings.

❖ View settings

Rendezvous settings are displayed.

msh> rendezvous

❖ Current computer name display

msh> rendezvous cname

❖ Display information about the current printer location

msh> rendezvous location

❖ Rendezvous computer name setting

You can specify the rendezvous computer name.

msh> rendezvous cname “computer name”

- The computer name can be entered using up to 63 alphanumeric characters.

❖ rendezvous Installation location information setting

You can enter information about the location where the printer is installed.

msh> rendezvous location “location”

- Information about location can be entered using up to 32 alphanumeric characters.

❖ **Setting order of priority for each protocol**

- `diprint`
`msh> rendezvous diprint {0-99}`
- `lpr`
`msh> rendezvous lpr {0-99}`
- `ipp`
`msh> rendezvous ipp {0-99}`

You can specify the order of priority for “diprint”, “lpr”, and “ipp”. Smaller numbers indicate higher priority.

❖ **IP TTL setting**

`msh> rendezvous ipttl {1-255}`

You can specify the IP TTL (the number of routers a packet can pass through).



☐ The default is 255.

❖ **Resetting the computer name and location information**

You can reset the computer name and location information.

`msh> rendezvous clear {cname | location}`

- `cname`
Reset the computer name. The default computer name will be displayed when the computer is restarted.
- `location`
Reset the location information. The previous location information will be deleted.

❖ **Interface configuration**

`msh> rendezvous linklocal "interface_name"`

- If many types of interface are installed, configure the interface that communicates with linklocal address.
 - If you do not specify an interface, the Ethernet interface is automatically selected.
- `ip1394` can be specified only when the IEEE 1394 interface is installed.
- `wlan` can be specified only when the IEEE 802.11b interface is installed.

| Interface | Interface configured |
|-----------|------------------------|
| ether | Ethernet interface |
| ip1394 | IEEE 1394 interface |
| wlan | IEEE 802.11b interface |

route

Use the “route” command to control the routing table.

❖ All route information display

```
msh> route
```

❖ Specified route information display

```
msh> route "destination"
```

- Specify the IP address to destination.

❖ Enabling/disabling Specified Destination

```
msh> route active {host|net} "destination" {on | off}
```

- You can turn the specified destination on or off. Host becomes the default setting.

❖ Adding Routing Table

```
msh> route add {host|net} "destination" "gateway"
```

- Adds a host or network route to “destination”, and a gateway address to “gateway” in the table.
- Specify the IP address to destination and gateway.
- Host becomes the default setting.

❖ Setting Default Gateway

```
msh> route add default gateway
```

❖ Deleting Specified destination from Routing Table

```
msh> route delete {host|net} "destination"
```

- Host becomes the default setting.
- IP address of destination can be specified.

❖ Route Flush

```
msh> route flush
```



- ☐ The maximum number of routing tables is 16.
- ☐ Set a gateway address when communicating with devices on an external network.
- ☐ The same gateway address is shared by all interfaces.

set

Use the “set” command to set the protocol information display “active” or “inactive”.

❖ View settings

The following command displays protocol information (active/inactive).

```
msh> set tcpip
```

```
msh> set appletalk
```

```
msh> set netware
```

```
msh> set smb
```

```
msh> set scsiprint
```

- scsiprint is available when the optional IEEE 1394 interface board is installed.

```
msh> set ip1394
```

- ip1394 can be specified only when the IEEE 1394 interface is installed.

```
msh> set protocol
```

- When protocol is specified, information about tcpip, appletalk, netware, and smb appears.

```
msh> set lpr
```

```
msh> set ftp
```

```
msh> set rsh
```

```
msh> set diprint
```

```
msh> set web
```

```
msh> set snmp
```

```
msh> set ssl
```

```
msh> set nrs
```

```
msh> set rfu
```

```
msh> set ipp
```

```
msh> set http
```

```
msh> set rendezvous
```

❖ Configuration

- Enter “up” to enable protocol, and enter “down” to disable protocol. You can set the protocol to “active” or “inactive”.

```
msh> set tcpip {up | down}
```

- If you disable TCP/IP, you cannot use remote access after logging off. If you did this by mistake, you can use the control panel to enable remote access via TCP/IP.

- Disabling TCP/IP also disables ip1394, lpr, ftp, rsh, diprint, web, snmp, ssl, ipp, http, and rendezvous

```
msh> set appletalk {up | down}
```

```
msh> set netware {up | down}
```

```
msh> set smb {up | down}
```

```
msh> set scsiprint {up | down}
```

- scsiprint is available when the optional IEEE 1394 interface board is installed.

```
msh> set ip1394 {up | down}
```

- ip1394 can be specified only when the IEEE 1394 interface is installed.

```
msh> set lpr {up | down}
```

```
msh> set ftp {up | down}
```

```
msh> set rsh {up | down}
```

```
msh> set diprint {up | down}
```

```
msh> set web {up | down}
```

```
msh> set snmp {up | down}
```

```
msh> set ssl {up | down}
```

- If Secured Sockets Layer (SSL, an encryption protocol) function is not available for the printer, you cannot use the function by enabling it.

```
msh> set nrs {up | down}
```

```
msh> set rfu {up | down}
```

```
msh> set ipp {up | down}
```

```
msh> set http {up | down}
```

```
msh> set rendezvous {up | down}
```

show

Use the “show” command to display network interface board configuration settings.

❖ View settings

```
msh> show
```

- If “-p” is added, you can view settings one by one.

Reference

For details about the information displayed, see [p.219 “Configuring the Network Interface Board”](#).

slp

Use “slp” command to configure SLP settings.

```
msh> slp ttl "ttl_val"
```

- You can search the NetWare server using SLP in the PureIP environment of NetWare 5/5.1 and Netware 6/6.5. Using the “slp” command, you can configure the value of TTL which can be used by SLP multicast packet.
- The default value of TTL is 1. A search is executed only within a local segment. If the router does not support multicast, the settings are not available even if the TTL value is increased.
- The acceptable TTL value is between 1 and 255.

smb

Use the “smb” command to configure or delete the computer or workgroup name for SMB.

❖ Computer Name settings

```
msh> smb comp
```

- Set computer name using up to 15 characters. Names beginning with “RNP” or “rnp” cannot be entered.

❖ Working Group Name settings

```
msh> smb group
```

- Set workgroup name using up to 15 characters

❖ Comment settings

```
msh> smb comment
```

- Set comment using up to 31 characters

❖ Notify print job completion

```
msh> smb notif {on | off}
```

- To notify print job completion, specify “on”. Otherwise, specify “off”

❖ Deleting Computer Name

```
msh> smb clear comp
```

❖ Deleting Group Name

```
msh> smb clear group
```

❖ Deleting Comment

```
msh> smb clear comment
```

❖ Protocol settings

```
msh> smb protocol [netbeui {up | down} | tcpip {up | down}]
```

- Enable or disable NetBEUI and TCP/IP. Specify “up” to enable, and “down” to disable.

snmp

Use the “snmp” command to display and edit SNMP configuration settings such as the community name.

❖ View settings

```
msh> snmp
```

- Default access settings 1 is as follows:
Community name:public
IP address:0.0.0.0
Access type:read-only / trap off
- Default access settings 2 is as follows:
Community name:admin
IP address:0.0.0.0
Access type:read-write / trap off
- If “-p” is added, you can view settings one by one.
- To display the current community, specify its registration number.

❖ Display

```
msh> snmp ?
```

❖ Community name configuration

```
msh> snmp "number" name "community_name"
```

- You can configure ten SNMP access settings numbered 1-10.
- The printer cannot be accessed from SmartDeviceMonitor for Admin or SmartDeviceMonitor for Client if “public” is not registered in numbers 1-10. When changing the community name, use SmartDeviceMonitor for Admin and SNMP Setup Tool to correspond with printer settings.
- The community name can be entered using up to 15 characters.

❖ Deleting community name

```
msh> snmp "number" clear "name"
```

❖ Access type configuration

```
msh> snmp "number" type "access_type"
```

| Access type | Type of access permission |
|-------------|---------------------------|
| no | not accessible |

| Access type | Type of access permission |
|-------------|-----------------------------------|
| read | read only |
| write | read and write |
| trap | user is notified of trap messages |

❖ Protocol configuration

```
msh> snmp {ip | ipx} {on | off}
```

- Use the following command to set protocols “active” or “inactive”: If you set a protocol “inactive”, all access settings for that protocol are disabled.
- Specify “ip” for TCP/IP, or “ipx” for IPX/SPX.
- {on} means “active” and {off} means “inactive”.
- IEEE 1394 interface is available for TCP/IP only.

❖ Configuration of protocol for each registration number

```
msh> snmp “number” active {ip | ipx} {on | off}
```

- To change the protocol of access settings, use the following command. However, if you have disabled a protocol with the above command, activating it here has no effect.

❖ Access configuration

```
msh> snmp “number” {ip/addr | ipx} “address”
```

- You can configure a host address according to the protocol used.
- The network interface board accepts requests only from hosts that have addresses with access types of “read-only” or “read-write”. Enter “0” to have network interface board accept requests from any host without requiring a specific type of access.
- Enter a host address to deliver “trap” access type information to.
- To specify TCP/IP, enter “ip” followed by a space, and then the IP address.
- To specify IPX/SPX, enter “ipx” followed by a space, the IPX address followed by a decimal, and then the MAC address of the network interface board.

❖ sysLocation configuration

```
msh> snmp location
```

❖ Deleting sysLocation

```
msh> snmp clear location
```

❖ sysContact setting

```
msh> snmp contact
```

❖ **Deleting sysContact**

```
msh> snmp clear contact
```

❖ **SNMP v1v2 function configuration**

```
msh> snmp v1v2 {on | off}
```

- Specify “on” to enable, and “off” to disable.

❖ **SNMP v3 function configuration**

```
msh> snmp v3 {on | off}
```

- Specify “on” to enable, and “off” to disable.

❖ **SNMP TRAP configuration**

```
msh> snmp trap {v1 | v2 | v3} {on | off}
```

- Specify “on” to enable, and “off” to disable.

❖ **Remote Configuration Authorization configuration**

```
msh> snmp remote {on | off}
```

- Specify “on” to enable, and “off” to disable.

❖ **SNMP v3 TRAP configuration display**

```
msh> snmp v3trap
```

```
msh> snmp v3trap {1- 5}
```

- If a number from 1-5 is entered, settings are displayed for that number only.

❖ **Configuring a sending address for SNMP v3 TRAP**

```
msh> snmp v3trap {1-5} {ip| ipx} address
```

❖ **Configuring a sending protocol for SNMP v3 TRAP**

```
msh> snmp v3trap {1-5} active {ip/addr | ipx} {on | off}
```

❖ **Configuring a user account for SNMP v3 TRAP**

```
msh> snmp v3trap {1-5} account "account_name"
```

- Enter an account name using up to 32 alphanumeric characters.

❖ **Deleting an SNMP v3 TRAP user account**

```
msh> snmp v3trap {1-5} clear account
```

❖ **Configuring an SNMP v3 encryption algorithm**

```
msh> snmp v3auth {md5 | sha1}
```

❖ **Configuring SNMP v3 encryption**

```
msh> snmp v3priv {auto | on}
```

- If you select “auto”, the print job will be encrypted when encryption is possible.
- If you select “on”, Clear Text communication is not possible, and encryption password must be set before encryption communication can be used.



- ☐ Encryption is possible when the security option is installed correctly and the password is specified.

sntp

The printer clock can be synchronized with a NTP server clock using Simple Network Time Protocol (SNTP). Use the “sntp” command to change SNTP settings.

❖ View settings

```
msh> sntp
```

❖ NTP server address configuration

You can specify the IP address of the NTP server.

```
msh> sntp server "IP_address"
```

❖ Interval configuration

```
msh> sntp interval "polling_time"
```

- You can specify the interval at which the printer synchronizes with the operator-specified NTP server. The default is 60 minutes.
- The interval can be entered between 16 and 16,384 minutes.
- If you set 0, the printer synchronizes with the NTP server only when you turn the printer on. After that, the printer does not synchronize with the NTP server.

❖ Time-zone configuration

```
msh> sntp timezone "+/-hour_time"
```

- You can specify the time difference between the printer clock and NTP server clock. Time is in 24-hour format.

spoolsw

Use the “spoolsw” command to configure Job Spool settings.

You can only specify diprint, lpr, ipp, ftp and smb protocol.

- The “spoolsw” command for configuring Job Spool settings is available only when the optional hard disk is installed.

❖ View settings

The Job Spool setting appears.

```
msh> spoolsw
```

❖ Job Spool setting

```
msh> spoolsw spool {on | off}
```



❑ Specify “on” to enable Job Spool, or “off” to disable it.

❖ Resetting Job spool setting

```
msh> spoolsw clear job {on | off}
```

- When the printer power is cut during job spooling, this determines whether to reprint the spooled job.

❖ Protocol configuration

```
msh> spoolsw diprint {on | off}
```

```
msh> spoolsw lpr {on | off}
```

```
msh> spoolsw ipp {on | off}
```

```
msh> spoolsw smb {on | off}
```

```
msh> spoolsw ftp {on | off}
```

- You can specify the settings for diprint, lpr, ipp, and smb.

sprint

Use the “sprint” command to make settings for IEEE 1394 (SCSI print).

❖ View settings

IEEE 1394 (SCSI print) settings are displayed.

```
msh> sprint
```

❖ Bidirectional configuration for IEEE 1394 (SCSI print)

Use this setting to set IEEE 1394 (SCSI print) bidirectional.
The default is “on”.

```
msh> sprint bidi {on | off}
```

status

The printer status can be checked using the following command:

❖ Messages

```
msh> status
```



For details, see [p.210 “Current Printer Status”](#).

syslog

Use the “syslog” command to display the information stored in the printer's system log.

❖ View message

```
msh> syslog
```



- ❑ For details about the information displayed, see [p.225 “System Log Information”](#).
-

upnp

Use the “upnp” command to display and configure the universal plug and play.

❖ Public URL display

```
msh> upnp url
```

❖ Public URL configuration

```
msh< upnp url "string"
```

- Enter the URL string in the character string.
-

web

Use the “web” command to display and configure parameters on Web Image Monitor.

❖ View Settings

```
msh> web
```

❖ URL Configuration

You can set URLs linked by clicking [URL] on Web Image Monitor. Specify “1” or “2” for x as the number corresponding to the URL. Up to two URLs can be registered and specified.

```
msh> web url http://"The URL or IP address you want to register"/
```

❖ Deleting URLs registered as link destinations

```
msh> web x clear url
```

Specify “1” or “2” for x as the corresponding number to the URL.

❖ Link name configuration

You can enter the name for [URL] that appears on Web Image Monitor. Specify “1” or “2” for x as the corresponding number to the link name.

```
msh> web name "Name you want to display"
```

❖ Deleting URL names registered as link destinations

```
msh> web x clear name
```

Specify "1" or "2" for x as the number corresponding to the link name.

❖ Help URL Configuration

You can set URLs linked by clicking [Help] or [?] on Web Image Monitor.

```
msh> web help http://"Help URL or IP address"/help/
```

❖ Deleting Help URL

```
msh> web clear help
```

wiconfig

Use the "wiconfig" command to make settings for IEEE 802.11b.

❖ View settings

```
msh> wiconfig
```

❖ View IEEE 802.11b settings

```
msh> wiconfig cardinfo
```

- If IEEE 802.11b is not working correctly, its information is not displayed.

❖ Configuration

```
msh> wiconfig "parameter"
```

| Parameter | Value configured |
|-----------------------------|--|
| mode {ap adhoc 802.11adhoc} | You can set the infrastructure mode (ap), the 802.11 Ad hoc mode (802.11adhoc), or the ad hoc mode (adhoc). The default is ad hoc mode. |
| ssid ID value | You can make settings for the SSID in the infrastructure mode. Usable characters are ASCII 0x20-0x7e (32 bytes). An SSID value is set automatically to the nearest access point if no setting is made. If no setting is made for the ad hoc mode, the same value as for the infrastructure mode or an ASSID value is automatically set. |

| Parameter | Value configured |
|---|--|
| channel frequency channel no. | <p>You can enable or disable the WEP function. To enable the WEP function, specify [on]; to disable it, specify [off].</p> <p>To start the WEP function, enter the correct WEP key.</p> |
| enc {on off} | <p>You can enable or disable the WEP function. To enable the WEP function, specify [on]; to disable it, specify [off].</p> <p>To start the WEP function, enter the correct WEP key.</p> |
| key { key value } val {1 2 3 4} | <p>You can specify the WEP key when entering in hexadecimal.</p> <p>With a 64-bit WEP, you can use 10 digit hexadecimal. With a 128-bit WEP, you can use 26 digit hexadecimal.</p> <p>Up to four WEP keys can be registered. Specify the number to be registered with "val".</p> <p>When a WEP is specified by key, the WEP specified by key phrase is overwritten.</p> <p>To use this function, set the same key number and WEP key for all ports that transmit data to each other.</p> <p>You can omit the numbers with "val". The key number is set to 1 when making these omissions.</p> |
| keyphrase { phrase } val {1 2 3 4} | <p>You can specify the WEP key when entering in ASCII.</p> <p>With a 64-bit WEP, you can use 10 digit hexadecimal. With a 128-bit WEP, you can use 26 digit hexadecimal.</p> <p>Up to four WEP keys can be registered. Specify the number to be registered with "val".</p> <p>When a WEP is specified by key phrase, the WEP specified by key is overwritten.</p> <p>To use this function, set the same key number and WEP key for all ports that transmit data to each other.</p> <p>You can omit the numbers with "val". The key number is set to 1 when making these omissions.</p> |
| encval {1 2 3 4} | <p>You can specify which of the four WEP keys is used for packet encoding. "1" is set if a number is not specified.</p> |

| Parameter | Value configured |
|----------------------------|--|
| auth {open shared} | You can set an authorization mode when using WEP. The specified value and authorized mode are as follows: open: open system authorized (default) shared: shared key authorized rate |
| rate {auto 11m 5.5m 2m 1m} | You can set the IEEE 802.11b transmitting speed. The speed you specify here is the speed at which data is sent. You can receive data at any speed. auto: automatically set (default) 11m: 11 Mbps fixed 5.5m: 5.5 Mbps fixed 2m: 2 Mbps fixed 1m: 1 Mbps fixed |

wins

Use the “wins” command to configure WINS server settings.

❖ Viewing settings

msh> wins

- If the IP address obtained from DHCP differs from the WINS IP address, the DHCP address is the valid address.

❖ Configuration

msh> wins “interface_name” {on | off}

- {on} means “active” and {off} means “inactive”.
- Be sure to specify the interface.
- ip1394 can be specified only when the IEEE 1394 interface is installed.
- wlan can be specified only when the IEEE 802.11b interface is installed.

| Interface name | Interface configured |
|----------------|------------------------|
| ether | Ethernet interface |
| ip1394 | IEEE 1394 interface |
| wlan | IEEE 802.11b interface |

❖ Address configuration

Use the following command to configure a WINS server IP address:

msh> wins “interface_name” {primary|secondary} “IP address”

- Use the “primary” command to configure a primary WINS server IP address.
- Use the “secondary” command to configure a secondary WINS server IP address.
- Do not use “255.255.255.255” as the IP address.

❖ NBT (NetBIOS over TCP/IP) Scope ID Selection

You can specify the NBT scope ID.

msh> wins “interface_name” scope “scope ID”

- The scope ID can be entered using up to 31 alphanumeric characters.
- Be sure to specify the interface.
- ip1394 can be specified only when the IEEE 1394 interface is installed.
- wlan can be specified only when the IEEE 802.11b interface is installed.

| Interface name | Interface configured |
|----------------|------------------------|
| ether | Ethernet interface |
| ip1394 | IEEE 1394 interface |
| wlan | IEEE 802.11b interface |

SNMP

The SNMP agent operating on UDP and IPX is incorporated into the built-in Ethernet board and optional IEEE 802.11b interface unit of this printer. Also, the SNMP agent operating on UDP is incorporated in the optional IEEE 1394 interface board.

Using the SNMP manager, you can get information about the printer.



❑ If you changed the printer's community name, change the configuration of the connected computer accordingly, using **SNMP Setup Tool**. For details, see **SNMP Setup Tool Help**.

The default community names are **[public]** and **[admin]**. You can get MIB information using these community names.

❖ Start SNMP Setup Tool

- Windows 95/98/Me, Windows 2000, Windows NT 4.0:
Click the **[Start]** button.
Point to **[SmartDeviceMonitor for Admin]** on the **[Programs]** menu.
Click **[SNMP Setup Tool]**.
- Windows XP:
Click the **[Start]** button.
Point to **[SmartDeviceMonitor for Admin]** on the **[All Programs]** menu.
Click **[SNMP Setup Tool]**.

❖ Supported MIBs(SNMPv1/v2)

- MIB-II
- PrinterMIB
- HostResourceMIB
- RicohPrivateMIB

❖ Supported MIBs(SNMPv3)

- MIB-II
- PrinterMIB
- HostResourceMIB
- RicohPrivateMIB
- SNMP-FRAMEWORK-MIB
- SNMP-TARGET-MIB
- SNMP-NOTIFICATION-MIB
- SNMP-USER-BASED-SM-MIB
- SNMP-VIEW-BASED-ACM-MIB

Getting Printer Information over the Network

This section explains details of each item displayed in the printer status and information.

Current Printer Status

The printer status can be checked using the following commands:

- UNIX: Use the “lpq” command and “rsh”, “rcp”, and “ftp” parameters.
- mshell: Use the “status” command.

| Messages | Description |
|-------------------------------|--|
| Access Restricted | The job was canceled because user have no authority. |
| Add staples (Booklet: Back) | The staple of booklet finisher (back) is exhausted. |
| Add staples (Booklet: Both) | The staple of booklet finisher is exhausted. |
| Add staples (Booklet: Front) | The staple of booklet finisher (front) is exhausted. |
| Adjusting... | The machine is initializing or calibrating. |
| Call Service Center | There is a malfunction in the machine. |
| Canceled | The job is reset. |
| Canceling Job... | The job is being reset. |
| Card/Counter not inserted | The machine is waiting for prepaid card or key. |
| Coin or amount not inserted | The machine is waiting for coin to be inserted. |
| Coin/Key Counter not inserted | The machine is waiting for coin or key counter. |
| Configuring... | Setting is being changed. |
| Cover Open: ADF | The document feeder is open. |
| Cover Open: Duplex Unit | The cover of the duplex unit is open. |
| Cover Open: Finisher | The cover of Finisher is open. |
| Cover Open: Front | The front cover is open. |
| Cover Open: Front/Left | The front cover or left cover is open. |
| Cover Open: Paper Exit / Rear | The paper exit cover or rear cover is open. |
| Cover Open: Right | The right cover is open. |
| Cover Open: Top | The top cover is open. |
| Data Size Error | The data size error occurred. |

| Messages | Description |
|--------------------------------|---|
| Empty: Black Toner | The black toner cartridge is almost empty. |
| Empty: Cyan Toner | The cyan toner cartridge is almost empty. |
| Empty: Magenta Toner | The magenta toner cartridge is almost empty. |
| Empty: Yellow Toner | The yellow toner cartridge is almost empty. |
| Energy Saver Mode | The machine is in Energy Saver Mode. |
| Error | An error has occurred. |
| Error at Printer: Red LED | An error has occurred. |
| Error in Printer | An error has occurred. |
| Error: Address Book | An error has occurred in the data of the address book. |
| Error: Command Transmission | An error has occurred in the machine. |
| Error: DIMM Value | A memory error occurred. |
| Error: Ethernet Board | An Ethernet board error has occurred. |
| Error: HDD Board | A hard disk drive board error has occurred. |
| Error: IEEE1394 Board | An IEEE 1394 interface board error has occurred. |
| Error: Memory Switch | A memory switch error has occurred. |
| Error: Optional Font | An error has occurred in the font file of the machine. |
| Error: Optional RAM | An error has occurred in the optional memory unit. |
| Error: Parallel I/F Board | An error has occurred in the parallel interface. |
| Error: PDL | An error has occurred in the page description language. |
| Error: USB Interface | An error has occurred in the USB interface. |
| Error: Wireless Card | Wireless card is not inserted during start up, or the IEEE 802.11b interface unit or the wireless card is taken out after start up. |
| Error: Wireless Card or Board | An error has occurred in the IEEE 802.11b interface unit. |
| Exceed Booklet Stapling Limit | The printing has exceeded the stapling limit of the booklet finisher. |
| Full: Copy Tray | The output paper tray is full. |
| Full: Finisher | Finisher tray is full. |
| Full: Finisher Shift Tray | Shift tray of Finisher is full. |
| Full: Finisher Shift Tray 1, 2 | The shift tray 1 and 2 of Finisher are full. |
| Full: Finisher Upper Tray | The upper tray of Finisher is full. |

| Messages | Description |
|---------------------------------|---|
| Full: Hole Punch Receptacle | Punch Chip receptacle for hole punch is full. |
| Full: Standard Tray | The output paper tray is full. |
| Full: Waste Toner | Waste toner is full. |
| Full: Waste Toner Bottle | Waste toner bottle is full. |
| Hex Dump Mode | It is a hex dump mode. |
| Immed. Trans. not connected | It did not connect directly with the other party of the transmission. |
| Immediate Transmission Failed | An error has occurred while transmitting directly. |
| In Use: Copier | The copier is being used. |
| In Use: Fax | The fax is being used. |
| In Use: Finisher | Other functions is using Finisher. |
| In Use: Input Tray | Other functions is using the input tray. |
| In Use: Staple Unit | Other functions is using the staple unit. |
| Independent-supplier Toner | Toner that is not recommended is set. |
| Key Card not inserted | The machine is waiting for key card to be inserted. |
| Key Card/Counter not inserted | The machine is waiting for key card or key counter to be inserted. |
| Key Counter not inserted | The machine is waiting for key counter to be left in it. |
| Loading Toner... | Toner is being supplied. |
| Low: Black Toner | The black toner cartridge is not set correctly, or toner is almost running out. |
| Low: Cyan Toner | The cyan toner cartridge is not set correctly, or toner is almost running out. |
| Low: Magenta Toner | The magenta toner cartridge is not set correctly, or toner is almost running out. |
| Low: Toner | The black toner cartridge is not set correctly, or toner is almost running out. |
| Low: Yellow Toner | The yellow toner cartridge is not set correctly, or toner is almost running out. |
| Malfunction: Booklet Processor | There is a problem with booklet finisher. |
| Malfunction: Ext. Charge Unit | There is a problem with external charge unit. |
| Malfunction: Finisher | There is a problem with Finisher. |
| Malfunction: Interposer | There is a problem with Interposer. |
| Malfunction: LargeCapacity Tray | There is a problem with LargeCapacity tray. |
| Malfunction: Output Tray | There is a problem with output tray. |

| Messages | Description |
|---------------------------------|--|
| Malfunction: Staple Unit | There is a problem with the staple unit. |
| Malfunction: Tray 1 | There is a problem with tray 1. |
| Malfunction: Tray 2 | There is a problem with tray 2. |
| Malfunction: Tray 3 | There is a problem with tray 3. |
| Malfunction: Tray 4 | There is a problem with tray 4. |
| Malfunction: Z-folding unit | There is a problem with the Z fold unit. |
| Memory Low: Copy | Memory shortage has occurred while the copy was operating. |
| Memory Low: Data Storage | Memory shortage has occurred while the document was being accumulated. |
| Memory Low: Fax Scanning | Memory shortage has occurred while transmitting the fax. |
| Memory Low: Scanning | Memory shortage has occurred while the scanner was working. |
| Miscellaneous Error | Other error has occurred. |
| Mismatch: Paper Size | Indicated paper tray does not contain paper of selected size. |
| Mismatch: Paper Size and Type | Indicated paper tray does not contain paper of selected size and type. |
| Mismatch: Paper Type | Indicated paper tray does not contain paper of selected type. |
| Near Replacing: Black PCU | Prepare the new black photoconductor unit. |
| Near Replacing: Color PCU | Prepare the new color photoconductor unit. |
| Near Replacing: Develop. Unit C | Prepare the new development unit (cyan). |
| Near Replacing: Develop. Unit K | Prepare the new development unit (black). |
| Near Replacing: Develop. Unit M | Prepare the new development unit (magenta). |
| Near Replacing: Develop. Unit Y | Prepare the new development unit (yellow). |
| Near Replacing: Fusing Unit | Prepare the new fusing unit. |
| Near Replacing: Maintenance Kit | Prepare the new maintenance kit. |
| Near Replacing: Transfer Unit | Prepare the new transfer unit. |
| Nearly Full: Waste Toner | Waste toner bottle is nearly full. |
| Need more Staples | Stapler has almost run out of staples. |
| No Paper: Interposer Tray | There is no paper in interposer unit. |
| No Paper: LCT | There is no paper in Large Capacity tray. |
| No Paper: Selected Tray | There is no paper in specified tray. |
| No Paper: Tray 1 | There is no paper in tray 1. |
| No Paper: Tray 2 | There is no paper in tray 2. |

| Messages | Description |
|---------------------------------|---|
| No Paper: Tray 3 | There is no paper in tray 3. |
| No Paper: Tray 4 | There is no paper in tray 4. |
| Not Detected: B2 Lever | B2 lever is not correctly set. |
| Not Detected: Black Toner | Black toner is not correctly set. |
| Not Detected: Cyan Toner | Cyan toner is not correctly set. |
| Not Detected: Develop. Unit (C) | The development unit (cyan) is not correctly set. |
| Not Detected: Develop. Unit (K) | The development unit (black) is not correctly set. |
| Not Detected: Develop. Unit (M) | The development unit (magenta) is not correctly set. |
| Not Detected: Develop. Unit (Y) | The development unit (yellow) is not correctly set. |
| Not Detected: Duplex Feed Unit | The duplex feed unit is not correctly set. |
| Not Detected: Finisher | Finisher is not correctly set. |
| Not Detected: Fusing Unit | The fusing unit is not correctly set. |
| Not Detected: Input Tray | The paper feed tray is not correctly set. |
| Not Detected: Interposer | Interposer unit is not correctly set. |
| Not Detected: LCT | A large amount of paper feed tray is not correctly set. |
| Not Detected: Magenta Toner | Magenta toner is not correctly set. |
| Not Detected: PCU (C) | The photoconductor unit (cyan) is not correctly set. |
| Not Detected: PCU (K) | The photoconductor unit (black) is not correctly set. |
| Not Detected: PCU (M) | The photoconductor unit (magenta) is not correctly set. |
| Not Detected: PCU (Y) | The photoconductor unit (yellow) is not correctly set. |
| Not Detected: Toner Magazine | The toner cartridge is not correctly set. |
| Not Detected: Transfer Roller | The transfer roller is not correctly set. |
| Not Detected: Transfer Unit | The transfer unit is not correctly set. |
| Not Detected: Tray 1 | Tray 1 is not correctly set. |
| Not Detected: Tray 2 | Tray 2 is not correctly set. |
| Not Detected: Tray 3 | Tray 3 is not correctly set. |
| Not Detected: Tray 4 | Tray 4 is not correctly set. |
| Not Detected: WasteToner Bottle | Waste toner bottle is not correctly set. |

| Messagess | Description |
|---------------------------------|---|
| Not Detected: Yellow Toner | Yellow toner is not correctly set. |
| Not Detected: Z-fold'g Internal | The Z fold unit is not correctly set. |
| Not Reached, Data Deleted | Unreached job is deleted. |
| Not Reached, Data Removed | Unreached job is deleted. |
| Not Reached, Data Stored | Unreached job is preserved. |
| Offline | Printer is offline. |
| Original on Exposure Glass | The original remains on the exposure glass. |
| Panel Off Mode | The machine is in Panel-Off mode. |
| Panel Off Mode>>>Printing ava. | The machine is in Control Panel-Off mode. |
| Paper in Duplex Unit | The paper remains in the duplex unit. |
| Paper in Finisher | The paper remains in Finisher. |
| Paper Misfeed: ADF | The paper has jammed in Document Feeder. |
| Paper Misfeed: Duplex Unit | The paper has jammed in the duplex unit. |
| Paper Misfeed: Input Tray | The paper has jammed in the input tray. |
| Paper Misfeed: Internal/Output | The paper has jammed inside the machine. |
| Paper Misfeed: Output Tray | The paper has jammed in output tray. |
| Paper on Finisher Shift Tray 2 | The paper remains in Finisher Shift Tray 2. |
| Paper on FinisherShiftTray1, 2 | The paper remains in Finisher Shift Tray 1 and 2. |
| Prepaid Card not inserted | The machine is waiting for prepaid card to be inserted. |
| Print Complete | The print was completed. |
| Printing | Printing is in progress. |
| Processing | Data is being processed. |
| RC Gate Connection Error | Failed connection with RC Gate. |
| Ready | The machine is ready to print. |
| Replace Black PCU | It is time to replace the black photoconductor unit. |
| Replace Charger | It is time to replace the charger kit. |
| Replace Cleaning Web | It is time to replace the Cleaning Web. |
| Replace Color PCU | It is time to replace the photoconductor unit (color). |
| Replace Develop. Unit | It is time to replace the development unit. |
| Replace Develop. Unit (Black) | It is time to replace the development unit (black). |

| Messages | Description |
|---------------------------------|---|
| Replace Develop. Unit (Color) | It is time to replace the development unit (color). |
| Replace Develop. Unit (Cyan) | It is time to replace the development unit (cyan). |
| Replace Develop. Unit (Magenta) | It is time to replace the development unit (magenta). |
| Replace Develop. Unit (Yellow) | It is exchange time of the development unit (yellow). |
| Replace Fusing Unit | It is time to replace the fusing unit. |
| Replace Maintenance Kit | It is time to replace the maintenance kit. |
| Replace PCU | It is time to replace the photoconductor unit. |
| Replace Transfer Belt | It is time to replace the transfer belt. |
| SD Card Authentication failed | SD card authentication failed. |
| Setting Remotely | The RDS setting is being processed. |
| Skipped due to Error | Skipped the error. |
| Storage Complete | The storage is complete. |
| Storage Failed | The storage has failed. |
| Supplies Order Call failed | The supply order call has failed. |
| Suspend / Resume Key Error | Finisher stop button was pressed. |
| Transmission Aborted | The transmission was interrupted. |
| Transmission Complete | The transmission completion was completed. |
| Transmission Failed | The transmission has failed. |
| Tray Error: Chaptering | The paper feed tray specification error has occurred because chaptering as well as the normal paper use the same tray for printing. |
| Tray Error: Duplex Printing | Selected paper tray cannot be used for duplex printing. |
| Unit Left Open: ADF | Document feeder is opened. |
| Warming Up... | The machine is warming up. |



- ☐ For details about UNIX commands, see UNIX Supplement.
- ☐ Check the error contents that may be printed in the configuration page. For details about printing a configuration page, see [p.128 “List/Test Print Menu”](#).

Printer configuration

You can check the printer configuration using telnet.

This section explains the checking procedure for input/output tray and printer language.

- UNIX: Use the “info” command and “rsh”, “rcp”, and “ftp” parameters.
- mshell: Use the “info” command.

❖ Input Tray

| Item | Description |
|-----------|---|
| No. | ID number of the paper tray |
| Name | Name of the paper tray |
| PaperSize | Size of paper loaded in the paper tray |
| status | Current status of the paper tray <ul style="list-style-type: none"> • Normal:Normal • NoInputTray: No tray • PaperEnd:No paper |

❖ Output Tray

| Item | Description |
|--------|---|
| No. | ID number of the output tray |
| Name | Name of the output tray |
| status | Current status of the output tray <ul style="list-style-type: none"> • Normal:Normal • PaperExist:Paper exist • OverFlow:Paper is full • Error:Other errors |

❖ Emulation

| Item | Description |
|---------|---|
| No. | ID number of the printer language used by the printer |
| Name | Name of the printer language used in the printer |
| Version | Version of the printer language |

↓ Note

- ❑ For details about UNIX commands and parameters, see UNIX Supplement.
- ❑ For details about mshell “info” commands, see [p.190 “info”](#).

Understanding the Displayed Information

This section explains how to read status information returned by the network interface board.

Print Job Information

Use the following command to display print job information:

- UNIX: Use the “info” command and “rsh”, “rcp”, and “ftp” parameters.
- mshell: Use the “info” command.

| Item | Description |
|------------|---|
| Rank | Print job status. <ul style="list-style-type: none"> • active Printing or preparing for printing. • Waiting Waiting to be transferred to the printer. |
| Owner | Print request user name. |
| Job | Print request number. |
| Files | The name of the document. |
| Total Size | The size of the data (spooled). The default is 0 bytes. |

Note

- ❑ For details about UNIX commands and parameters, see UNIX Supplement.
- ❑ For details about mshell “info” commands, see [p.190 “info”](#).

Print Log Information

This is a record of the most recent 16 jobs printed.

Use the following command to display print log information:

- UNIX: Use the “prnlog” command and “rsh”, “rcp”, and “ftp” parameters.
- telnet : Use the “prnlog” command. See [p.193 “prnlog”](#).

| Item | Description |
|------|--------------------------|
| ID | Print request ID. |
| User | Print request user name. |
| Page | Number of pages printed |

| Item | Description |
|---------|---|
| Result | Print Request Result Communication Result <ul style="list-style-type: none"> • OK Print was completed normally. However, the print result may not be as required due to printer problems. • NG Printing was not completed normally. • Canceled An “rcp”, “rsh”, or “lpr” command print request was canceled, possibly due to the printing application. Not applicable to the “ftp” or “rprinter” command. |
| Time | Time the print requested was received. Time of print request reception |
| User ID | Printer driver-configured User ID. Appears when the print request ID is specified. |
| JobName | Name of the document for printing Appears when the print request ID is specified. |

 Note

- ❑ For details about UNIX commands and parameters, see UNIX Supplement.
- ❑ For details about mshell prnlog commands, see [p.193 “prnlog”](#).

Configuring the Network Interface Board

Use the following command to display network interface board settings:

- telnet : Use the “show” command.

| Item | Description |
|--------------------|--|
| Common | |
| mode | |
| Protocol Up/Down | [up] means “active” and [down] means “inactive”. |
| appletalk | |
| TCP/IP | |
| netware | |
| SMB | |
| IP over 1394 | |
| SCSI print | |
| Ethernet interface | Internal version number |
| Syslog priority | |
| NVRAM version | Internal version number |

| Item | Description |
|-------------|---|
| Device name | Printer name |
| Comment | Comment |
| location | Location of the printer in the SNMP and Rendezvous information |
| Contact | Administrator information for the printer and contact information in the SNMP information |
| Soft switch | |
| appletalk | |
| mode | AppleTalk protocol in selection |
| Net | Network number |
| Object | Macintosh printer name |
| Type | Type of printer |
| Zone | Name of the zone that the printer belongs to |
| TCP/IP | |
| mode | [up] means “active” and [down] means “inactive”. |
| ftp | |
| lpr | |
| rsh | |
| telnet | |
| diprint | |
| web | |
| http | |
| ftpc | |
| snmp | |
| ipp | |
| autonet | |
| rendezvous | |
| ssl | |
| nbt | |
| rfu | |
| EncapType | |
| dhcp | |
| Host name | |
| Address | |
| netmask | |
| | Frame type |
| | Dynamic Host Configuration Protocol (on/off) |
| | IP address |
| | Subnet mask |

| Item | Description |
|--------------------------|--------------------------------------|
| broadcast | Broadcast address |
| DNS Domain | DNS domain type |
| gateway | Default gateway address |
| Access Range[☆] | Access control range |
| Time server | NTP server address |
| Time Zone | NTP server time difference |
| Time server polling time | NTP server interval |
| SYSLOG server | |
| Home page URL | URL of homepage. |
| Home page link name | URL of home page |
| netware | |
| EncapType | Frame type |
| RPRINTER number | Remote printer number |
| Print server name | Print server name |
| File server name | Name of the connect file server |
| Context name | Context of print server |
| Switch | |
| mode | Active mode |
| NDS/Bindery | (this value is fixed) |
| Packet negotiation | |
| Login Mode | Login mode |
| Print job timeout | Packet timeout |
| protocol | Protocol used |
| SAP interval time | |
| NDS Tree Name | NDS tree name |
| SMB | |
| Switch | |
| mode | (this value is fixed) |
| Direct print | (this value is fixed) |
| Notification | Notification of print job completion |
| Workgroup name | Name of the workgroup |
| Computer name | Name of the computer |
| Comment | Comment |
| Share name[1] | Share name (model of the printer) |

| Item | Description |
|---------------------|--|
| protocol | |
| IEEE 802.11b | |
| Device name | Printer name |
| dhcp | DHCP (on/off) |
| Address | IP address |
| netmask | Subnet mask |
| broadcast | Broadcast address |
| DNS Domain | DNS domain type |
| ssid | SSID used |
| Channel range | Channels available for use |
| Channel | Channel used |
| Communication mode | IEEE 802.11b interface transmitting mode |
| Authentication | |
| TX Rate | IEEE 802.11b interface speed |
| WEP encryption | WEP enabled or disabled |
| Encryption key | WEP key |
| IP over 1394 | |
| Host name | |
| DHCP | DHCP (on/off) |
| Address | IP address |
| netmask | Subnet mask |
| broadcast | Broadcast address |
| DNS Domain | |
| SCSI print | |
| Bidi. | Bidirectional setting (on/off) |
| Bluetooth | |
| Bluetooth mode | Bluetooth connection mode |
| UPnP | |
| URL | |
| dns | |
| Server[X]: | IP address of the DNS server |
| Selected DNS Server | Selected DNS server |
| Domain Name | |
| ether | Domain name on an Ethernet connection |

| Item | Description |
|--|--|
| wlan ip1394 | Domain name on a wireless LAN connection |
| rendezvous Computer Name Rendezvous Name (ether) Rendezvous Name (wlan) Rendezvous Name (ip1394) location Priority (diprint) Priority (lpr) Priority (ipp) IP TTL LinkLocal Route for Multi I/F: Ethernet (ether) | Computer name Rendezvous name on an Ethernet connection Rendezvous name on a wireless LAN connection Rendezvous name on an IP over 1394 connection Location of the printer diprint priority number lpr priority number ipp priority number IP TTL value [IEEE 802.11b (wlan)] appears when IEEE 802.11b is selected. [IP over 1394 (ip1394)] appears when IEEE1394 is selected. |
| DDNS ether wlan ip1394 | Dynamic DNS function on an Ethernet connection (on/off) Dynamic DNS function on a wireless LAN connection (on/off) Dynamic DNS function on an IP over 1394 connection (on/off) |
| wins ether Primary WINS Secondary WINS ip1394 Primary WINS Secondary WINS | IP address of the primary WINS server on an Ethernet connection IP address of the secondary WINS server on an Ethernet connection IP address of the primary WINS server on an IP over 1394 connection IP address of the secondary WINS server on an IP over 1394 connection |
| SNMP SNMPv1v2 SNMPv3 protocol | |

| Item | Description |
|--|-------------------------------------|
| v1Trap v2Trap v3Trap SNMPv1v2Remoto Setting SNMPv3 Privacy | |
| Shell mode | Mode of the remote maintenance tool |

Message List

This is a list of messages that appear in the printer's system log. The system log can be viewed using the “syslog” command.

System Log Information

Use the following command to display the system log information:

- UNIX: Use the “syslog” command and “rsh”, “rcp”, and “ftp” parameters.
- telnet : Use the “syslog” command.

| Message | Problem and solutions |
|---|---|
| Access to NetWare server <file server name> denied. Either there is no account for this print server on the NetWare server or the password was incorrect. | (In the print server mode) Login to the file server failed. Make sure that the print server is registered on the file server. If a password is specified for the print server, delete it. |
| add_sess: bad trap addr:<IpAddress>, community:<community name> | The IP address (0.0.0.0) is unavailable when the community access type is TRAP. Specify the host IP address for the TRAP destination. |
| add_sess: community<community name> already defined. | The same community name already exists. Use another community name. |
| add_sess_ipx: bad trap addr: <IPXaddress>, community:<community name> | The IPX address (00:00:00:00:00:00) is unavailable when the community access type is TRAP. Specify the host IPX address for the TRAP destination. |
| add_sess_ipx: community <community name> already defined. | The same community name already exists. Use another community name. |
| ANONYMOUS FTP LOGIN FROM <IP address>, <password> | An anonymous login has been made with a password <password> from the host <IP address>. |
| anpd start. (AppleTalk) | The ANPD (AppleTalk Network Package Daemon) service has started. |
| Attach FileServer= <file server name> | Connection to the file server as the nearest server has been established. |
| Attach to print queue <print queue name> | (In the print server mode) Attached to the print queue. |
| Cannot create service connection | (In the remote printer mode) Connection to the file server has not been established. The number of file server users may have exceeded the maximum capacity of the file server. |
| Cannot find rprinter (<print server name>/<printer number>) | The printer with the number displayed on the print server does not exist. Make sure that the printer number is registered on the print server. |

| Message | Problem and solutions |
|---|--|
| Change IP address from DHCP Server. | The IP address changes when DHCP lease is renewed. To always assign the same IP address, set a static IP address to the DHCP server. |
| child process exec error! (process name) | The network service failed to start. Turn the printer off and then on. If this does not work, contact your service or sales representative. |
| Connected DHCP Server(<DHCP server address>). | The IP address was successfully received from the DHCP server. |
| connection from <IP address> | Login was from the host IP address. |
| Could not attach to FileServer<error number> | (In the remote printer mode) Connection to the file server has not been established. The file server has refused the connection. Check the file server configuration. |
| Could not attach to PServer<print server> | (In the remote printer mode) Connection to the print server has not been established. The print server has refused the connection. Check the print server configuration. |
| Current Interface Speed:xxxMbps | Speed of the network (10 Mbps or 100 Mbps) |
| Current IP address <current IP address> | The IP address <current IP address> was received from the dhcp server. |
| Current IPX address<IPX address> | Current ipx address |
| DHCP lease time expired. | DHCP lease time has expired. The printer tries to discover the DHCP server again. The IP address until now becomes invalid. |
| DHCP server not found. | The DHCP server was not found. Make sure that the DHCP is on the network. |
| dhcpcd start. | The DHCPCD service (dhcp client service) has started. |
| Duplicate IP=<IP address>(from <MAC address>). | The same IP address is used. Each IP address must be unique. Check the address of the device indicated in [MAC address]. |
| Established SPX Connection with PServer,(RPSocket=<socket number>, con- nID=<connection ID>) | (In the remote printer mode) Connection to the print server has been established. |
| exiting | The lpd service has ended and the system is exiting the process. |
| Exit pserver | (In the print server mode) The print server function is disabled because the necessary print server settings have not been made. |
| Frametype =<frame type name> | The frame type name is configured to be used on NetWare. |
| httpd start. | The httpd service has started. |

| Message | Problem and solutions |
|---|--|
| inetd start. | The inetd service has started. |
| IPP cancel-job: permission denied. | The printer could not authenticate the name of the user attempting to cancel a job. |
| ipp disable. | Printing with ipp is disabled. |
| ipp enable. | Printing with ipp is enabled. |
| IPP job canceled. jobid=%d. | The spooled job was canceled due to error or user request. |
| LeaseTime=<lease time>(sec), Renew-Time=<renew time>(sec). | The resource lease time received from the DHCP server is displayed in [lease time] in seconds. The renewal time is displayed in [renew time] in seconds. |
| Login to fileserver <file server name> (<IPX IP>,<NDS BINDERY INDS BINDERY>) | (In the print server mode) Login to the file server is in the NDS or BINDERY mode. |
| multid start. | Data transmission service for multiprotocols has started. |
| nbstart start. (NetBEUI) | The service for NetBEUI protocol stack setting has started. |
| NBT Registration Broadcast(<NetBIOS name>) | Use a local broadcast to map the NetBIOS name with the IP address. |
| nbttd start. | The nbttd service has started (available only in the DHCP mode). |
| NetBEUI Computer Name =<computer name> | The NetBEUI computer name is specified. |
| nmsd start. (NetBEUI) | The nmsd (Name Server Daemon) service has started. |
| npriter start. (NetWare) | (In the remote printer mode) The NetWare service has started. |
| nwstart start. (NetWare) | The service for NetWare protocol stack setting has started. |
| Open log file <file name> | (In the print server mode) The specified log file has been opened. |
| papd start. (AppleTalk) | The AppleTalk print service has started. |
| phy release file open failed. | Replacing the network interface board is required. Contact your sales or service representative. |
| Print queue <print queue name> cannot be serviced by printer 0, <print server name> | (In the print server mode) The print queue cannot be established. Make sure that print queue exists on the specified file server. |
| Print server <print server name>has no printer. | (In the print server mode) The printer is not assigned to the print server. Using NWadmin, assign the printer, and then restart it. |
| print session full | No more print jobs can be accepted. |

| Message | Problem and solutions |
|---|--|
| Printer <printer name> has no queue | (In the print server mode) The print queue is not assigned to the printer. Using NWadmin, assign the print queue to the printer, and then restart it. |
| pserver start. (NetWare) | (In the print server mode) The NetWare service has started. |
| Required computer name (<Computer name>) is duplicated name | The start job found the computer name by adding the computer name to the suffix (0,1...). Set a new computer name that is unique. |
| Required file server (<file server name>) not found | The required file server is not found. |
| restarted. | The lpd service has started. |
| sap enable, saptype=<SAP type>, sap-name=<SAP name> | The SAP function has started. The SAP packet is issued to advertise the service on the SAP table on the NetWare server. |
| session <community name> already defined. | The requested community name is not defined. |
| session_ipx <community name> not defined. | The requested community name is not defined. |
| Set context to <NDS context name> | An NDS context name has been set. |
| shutdown signal received. network service rebooting... | The network service is rebooting. |
| smbd start. (NetBEUI) | The smbd service has started. |
| SMTPC: failed to get smtp server ip-address. | The SMTP server IP address could not be obtained. This could be because: <ul style="list-style-type: none"> • The specified DNS server could not be found. • No connection to the network has been established. • The specified DNS server could not be found. • An incorrect DNS server is specified. • The specified SMTP server IP address could not be found in the DNS server. |
| SMTPC: failed to connect smtp server. timeout. | Connection to the SMTP server failed due to timeout. This could be because: <ul style="list-style-type: none"> • The specified SMTP server name is incorrect. • No connection to the network has been established. • The network configuration is incorrect, so there is no response from the SMTP server. |

| Message | Problem and solutions |
|--|---|
| SMTPC: refused connect by smtp server. | <p>Connection to the SMTP server is denied. This could be because:</p> <ul style="list-style-type: none"> • A server other than the SMTP server has been specified. • The specified SMTP server port number is incorrect. |
| SMTPC: no smtp server. connection close. | <p>Connection to the SMTP server failed due to no response from SMTP. This could be because:</p> <ul style="list-style-type: none"> • A server other than the SMTP server has been specified. • The specified SMTP server port number is incorrect. |
| SMTPC: failed to connect smtp server. | <p>Connection to the SMTP server failed. This could be because:</p> <ul style="list-style-type: none"> • No connection to the network has been established. • The network configuration is incorrect, so there is no response from the SMTP server. • The specified SMTP server name is incorrect. • An incorrect SMTP server is specified. • The specified SMTP server IP address could not be found in the DNS server. • A server other than the SMTP server has been specified. • The specified SMTP server port number is incorrect. |
| SMTPC: username or password wasn't correct.[response code] (information) | <p>Connection to the SMTP server failed. This could be because:</p> <ul style="list-style-type: none"> • The specified SMTP user name is incorrect. • The specified SMTP password is incorrect. <p>Check the SMTP user name and password.</p> |
| Snmp over ip is ready. | Communication over TCP/IP with snmp is available. |
| Snmp over IP over 1394 is ready. | Communication over IP over 1394 with snmp is available. |
| Snmp over ipx is ready. | Communication over IPX with snmp is available. |
| SNMPD: account is unavailable: Same account name be used. | User account is disabled. This could be because it use the same account name as the administrator account. |

| Message | Problem and solutions |
|---|---|
| SNMPD: account is unavailable: The authentication password is not set up. | User account is disabled. This could be because the authentication password is not set, and only the encryption account is set. |
| SNMPD: account is unavailable: encryption is impossible. | Encryption is not possible and account is disabled. This could be because: <ul style="list-style-type: none"> • Security option is not installed. • Encryption password has not been specified. |
| SNMPD: trap account is unavailable. | v3Trap cannot be sent. This could be because the Trap destination account is different from the account specified by the printer. |
| snmpd start. | The snmpd service has started. |
| started. | The direct print service has started. |
| Started. | The rendezvous function is enabled. |
| Terminated. | The rendezvous function is disabled. |
| The print server received error <error number> during attempt to log in to the network. Access to the network was denied. Verify that the print server name and password are correct. | Login to the file server failed. The print server is not registered or a password is specified. Register the print server without specifying a password. |
| WINS name refresh :Server No Response | There was no response to the update request from the print server. Check that the WINS server address is correct and the WINS server is working properly. |
| WINS name registration/refresh error code(error number) | Set unique NetBIOS names. Check that the WINS server address is correct and the WINS server is working properly. |
| WINS name registration:Server No Response | There was no response to the registration request from the server. Check that the WINS server address is correct and the WINS server is working properly. |
| WINS server address 0.0.0.0 | The WINS server was not specified. Specify the WINS server address to match the printer name with WINS. |
| WINS Server=<WINS server address> NetBIOS Name=<NetBIOS name> | The printer name was successfully registered. |
| WINS wrong scopeID | The scope ID is incorrect. Specify the correct scope ID. |

 Note

- ❑ For details about UNIX commands and parameters, see UNIX Supplement.
- ❑ For details about “syslog” command, see [p.204 “syslog”](#).

Preparing Printer Server

This section explains how to configure the printer as a Windows network printer. The printer is configured to enabling network clients to use it. When the network printer is connected via SmartDeviceMonitor for Client, you can set the printing notification function to notify clients of the results of their print jobs.

★ Important

- ❑ Under Windows 2000, Windows XP Professional, or Windows Server 2003, to change printer properties in the **[Printer]** folder, you need Printer Management access authentication; under Windows NT 4.0, Full Control access authentication. Log on to the file server as an Administrator or member of the PowerUsers group.

1 Open the [Printers] window from the [Start] menu.

The [Printers] window appears.

2 Click the icon of the printer you want to use. On the [File] menu, click [Properties]. The printer properties appear.

3 On the [Sharing] tab, click [Shared as:].

4 To share the printer with users using a different version of Windows, click [Additional Drivers...].

↓ Note

- ❑ If you have installed an alternative driver by selecting **[Shared as:]** during the printer driver installation, this step can be ignored.

5 Click [OK]. Close the printer properties.

Printing notification via SmartDeviceMonitor for Client

Follow the procedure below to configure the printer to use the printing notification function of SmartDeviceMonitor for Client.

Setting the print server

★ Important

- ❑ Under Windows 2000, Windows XP Professional, or Windows Server 2003, to change printer properties in the **[Printer]** folder, you need Printer Management access authentication; under Windows NT 4.0, Full Control access authentication. Log on to the file server as an Administrator or member of the PowerUsers group.

1 From the [Start] button on the task bar, point to [Program], point to [Smart-DeviceMonitor for Client], and then click [Print Server Setting].

The print server setting dialog box appears.

2 Select the [Notify Client of Printing] check box, and click [OK].

After print server setting is made, a dialog box appears. Confirm the dialog box content, and click [OK].

Click [Cancel] to interrupt the procedure.

3 A dialog box appears for client setting. Click [OK].

The print server setting is complete. Each client must be set to receive print notification.



- ☐ Current printing jobs restart from the beginning after the spooler pauses briefly.
- ☐ When the expansion function is not used, the function is automatically set as available.

Setting a Client

1 From the [Start] button on the task bar, point to [Program], point to [SmartDeviceMonitor for Client], and then click [Setting Expansion Function].

A dialog box for setting the expansion function appears.

2 Select the [Use the expansion function] check box in [Notify Printing].

3 Select the [Notify when using the print server] check box.

4 Click [OK].

The dialog box for setting the expansion function closes. The client setting is completed.



- ☐ Set the printing notification function on the printer driver as well as on SmartDeviceMonitor for Client.

Using NetWare

This section describes the setting procedure for network printers in the NetWare environment. In the NetWare environment, you can connect the printer as a “print server” or “remote printer”.

❖ Setting procedure

- When using the printer as a print server
 - ① Installing SmartDeviceMonitor for Admin
 - ② Setting the network interface board.
 - ③ Turning the printer off and then back on.
- When using the printer as a remote printer
 - ① Installing SmartDeviceMonitor for Admin.
 - ② Setting the network interface board.
 - ③ Setting NetWare.
 - ④ Starting the print server.

↓ Note

- ☐ This procedure assumes an environment is already prepared for normal NetWare running the printing service setting.
- ☐ The procedure is explained with the following example settings:
 - File server’s name ...CAREE
 - Print server’s name ...PSERV
 - Printer’s name ...R-PRN
 - Queue name ...R-QUEUE

❖ Using SmartDeviceMonitor for Admin

To use the printer in a NetWare environment, use SmartDeviceMonitor for Admin to set the NetWare printing environment.

↓ Note

- ☐ The NetWare Client provided by Novell is required to set the printing environment using SmartDeviceMonitor for Admin under the following environments:
 - NDS mode in Windows 95/98/Me
 - NDS or Bindery mode in Windows 2000/XP, Windows NT 4.0

📖 Reference

For details about installing SmartDeviceMonitor for Admin, see [p.168 “Installing SmartDeviceMonitor for Admin”](#).

❖ **Printers listed by SmartDeviceMonitor for Admin**

SmartDeviceMonitor for Admin lists printers connected to the network. If you cannot identify the printer you want to configure, print configuration page, and then check the printer name.

Setting Up as a Print Server (NetWare 3.x)

Follow the procedure below to connect the printer as a print server using NetWare 3.x.

- 1** Log on to the file server as a supervisor or supervisor equivalent.
- 2** Start NIB Setup Tool from the [Start] menu.
- 3** Click [Wizard], and then click [OK].
- 4** Select a printer you want to configure.
- 5** Enter the printer name in the [Device Name] box and a comment in the [Comment] box, and then click [Next].
- 6** Select the [NetWare] check box, and then click [Next].
- 7** Click [Bindery mode], enter the file server name in the [File Server Name] box, and then click [Next].
 In the [File Server Name] box, enter the name of the file server in which a print server is created. You can also click [Browse] to browse through available file servers.
- 8** Enter the print server name in the [Print Server Name] box, the printer name in the [Printer Name] box, and the print queue name in the [Print Queue Name] box, and then click [Next].
 - In the [Print Server Name] box, enter the name of the NetWare print server using up to 47 characters.
 - In the [Printer Name] box, enter the name of the NetWare printer.
 - In the [Print Queue Name] box, enter the name of the print queue to be added to NetWare.
- 9** Check the settings, and then click [Next].
 The settings are applied, and NIB Setup Tool quits.
- 10** Turn the printer off and then on again.



- ☐ To check that the configuration is made correctly, enter the following from the command prompt.

F:> USERLIST

- ☐ If the printer works as configured, the name of the print server appears as a connected user.
- ☐ If you cannot identify the printer you want to configure, check the printer name with the configuration page printed from the printer. For details about printing a configuration page, see [p.128 “List/Test Print Menu”](#).
- ☐ If no printer names appear in the list, match the frame types of IPX/SPXs for the computer and printer. Use the **[Network]** dialog box of Windows to change the frame type of the computer.

Reference

For details about changing the printer's frame type (“NW Frame Type”), see “Configuring the Printer”, Setup Guide.

Setting Up as a Print Server (NetWare 4.x, 5/5.1, 6/6.5)

Follow the procedure below to connect the printer as a print server using NetWare 4.x, NetWare 5/5.1, or NetWare 6.0.

Important

- ☐ When using the printer as a print server in NetWare 4.x, NetWare 5/5.1, or NetWare 6.0, set it to the NDS mode.
- ☐ When using NetWare 5/5.1 or NetWare 6.0, set the printer as a print server.

- 1** Log on to the file server as a supervisor or supervisor equivalent.
- 2** Start NIB Setup Tool on the [Start] menu.
- 3** Click [Wizard], and then click [OK].
- 4** Select a printer you want to configure.
- 5** Enter the printer name in the [Device Name] box and a comment in the [Comment] box, and then click [Next].
- 6** Select the [NetWare] check box, and then click [Next].
- 7** Click [NDS mode], enter the file server name in the [File Server Name] box, the NDS tree name in the [NDS Tree:] box, and the context in the [NDS Context:] box, and then click [Next].

In the [File Server Name] box, enter the name of the file server in which a print server is created. You can also click **[Browse]** to browse through available file servers and NDS context names.

In the [NDS Tree:] box, enter the name of the NDS tree in which a print server is created using up to 32 alphanumeric characters. Hyphens and underscores can also be used. You can also click **[Browse]** to browse through available NDS trees.

For a context, object names are entered from the lowest object with each object separated by a period. For example, if you want to create a print server in NET under DS, enter “NET.DS”.

8 Enter the print server name in the [Print Server Name] box, the printer name in the [Printer Name] box, the print queue name in the [Print Queue Name] box, and the print queue volume in the [Print Queue Volume] box, and then click [Next].

- In the **[Print Server Name]** box, enter the name of the NetWare print server using up to 47 characters.
- In the **[Printer Name]** box, enter the name of the NetWare printer.
- In **[Print Queue Name]** box, enter the print queue volume.
- In **[Print Queue Volume]**, type the print queue volume. For a volume, object names are entered from the lowest object with each object separated by a period. You can also click **[Browse]** to browse through available volumes.

9 Check the settings, and then click [Next].

The settings are applied, and NIB Setup Tool quits.

10 Turn the printer off and then on again.



- ☐ To check that the configuration is made correctly, enter the following from the command prompt.

F:> NLIST USER /A/B

- ☐ If the printer works as configured, the name of the print server appears as a connected user.
- ☐ If you cannot identify the printer you want to configure, check the printer name with the configuration page printed from the printer. For details about printing a configuration page, see [p.128 “Printing a Configuration Page”](#).
- ☐ If no printer names appear in the list, match the frame types of IPX/SPXs for the computer and printer. Use the **[Network]** dialog box of Windows to change the frame type of the computer.



For details about changing the printer's frame type (“NW Frame Type”), see “Configuring the Printer”, Setup Guide.

When using the printer in a pure IP environment of NetWare 5/5.1 or NetWare 6.0/6.5, see [p.236 “Using Pure IP in the NetWare 5/5.1 or 6/6.5 Environment”](#).

Using Pure IP in the NetWare 5/5.1 or 6/6.5 Environment

Follow the procedure below to connect the printer as a print server in a pure IP environment of NetWare 5/5.1.

★ Important

- ☐ When creating a queued print server in a pure IP environment of NetWare 5/5.1 or NetWare 6.0, create a print queue on the file server using NetWare Administrator.
- ☐ This printer is not available as a remote printer for use in a pure IP environment.
- ☐ To use the printer in a pure IP environment, set it to TCP/IP.

Setting up using NIB Setup Tool

1 Log on to the file server as an administrator or administrator equivalent.

2 Start NIB Setup Tool on the [Start] menu.

3 Click [Property Sheet], and then click [OK].

4 Select a printer you want to configure.

5 On the [NetWare] tab, Select [File Server Mode] or [NDS mode] in the [Logon Mode] area.

When [File Server Mode] is selected, the network connection is established based on the string entered in the [File Server Name(F):] box.

When [NDS mode] is selected, the network connection is established based on the string entered in the [NDS Tree:] box.

6 In the [Print Server Name] box, enter the name of the print server.

7 In the [File Server Name] box, enter the name of the file server in which a print server is created.

You can also click [Browse] to browse through available file servers.

8 Enter the NDS tree name in the [NDS Tree:] box.

Enter up to 32 alphanumeric characters. Hyphens and underscores can also be used.

9 In the [NDS Context:] box, enter the context of the print server.

You can also click [Browse] to browse through available NDS trees and NDS contexts.

For a context, object names are entered from the lowest object with each object separated by a period. For example, if you want to create a print server in Net under DS, enter "NET.DS".



10 In the [Print Server Operation Mode] area, click [As Print Server].

11 Click [OK] to close the [NIB Setup Tool] dialog box.

Setting up using NWadmin

1 From Windows, start NWadmin.

For details about NWadmin, see the NetWare manuals.

2 Select the object in which the print queue is located in the directory tree, and then click [Create] on the [Object] menu.

3 In the [Class of new object] box, click [Print Queue], and then click [OK].

4 In the [Print Queue Name] box, enter the name of the print queue.

5 In the [Print Queue Volume] box, click [Browse].

6 In the [Available objects] box, click the volume in which the print queue is created, and then click [OK].

7 Check the settings, and then click [Create].

8 Select the object in which the printer is located, and then click [Create] on the [Object] menu.

9 In the [Class of new object] box, click [Printer], and then click [OK]. For NetWare 5, click [Printer (Non NDPS)].

10 In the [Printer name] box, enter the printer name

11 Select the [Define additional properties] check box, and then click [Create].

12 Click [Assignments], and then click [Add] in the [Assignments] area.

13 In the [Available objects] box, click the queue you, and then click [OK].

14 Click [Configuration], click [Parallel] in the [Printer type] list, and then click [Communication].

15 Click [Manual load] in the [Communication type] area, and then click [OK].

16 Check the settings, and then click [OK].

17 Select a context specified using NIB Setup Tool, and then click [Create] on the [Object] menu.

18 In the [Class of new object] box, click [Print Server], and then click [OK]. For NetWare 5, click [Print Sever (Non NDPS)].

19 In the [Print Server Name] box, enter the print server name.

Use the same print server name specified using NIB Setup Tool.

20 Select the [Define additional properties] check box, and then click [Create].

21 Click [Assignments], and then click [Add] in the [Assignments] area.

22 In the [Available objects] box, click the queue you created, and then click [OK].

23 Check the settings, and then click [OK].

24 Start the print server by entering the following from the console of the NetWare server.

If the print server is in operation, quit and restart it.

❖ To exit

```
CAREE: unload pserver
```

❖ To start

```
CAREE: load pserver "print_server_name"
```

Setting Up as a Remote Printer (NetWare 3.x)

Follow the procedure below to use the printer as a remote printer under NetWare 3.x.

Setting up using NIB Setup Tool

1 Log on to the file server as a supervisor or supervisor equivalent.

2 Start NIB Setup Tool from [Start] menu.

3 Click [Property Sheet], and then click [OK].

4 Select a printer you want to configure.

5 On the [NetWare] tab, enter the name of the print server in the [Print Server Name] box.

6 In the [File Server Name] box, enter the name of the file server in which a print server is created.

You can also click [Browse] to browse through available file servers.

7 In the [Print Server Operation Mode] area, click [As Remote Printer].

8 In the [Remote Printer No.] box, enter the printer number.

Use the same printer number created in the print server.

9 A confirmation message appears. Click [OK].

10 On the [NIB] menu, click [Exit].

Setting up using PCONSOLE

1 Enter “PCONSOLE” from the command prompt.

F: > PCONSOLE

2 Create a print queue.

When using the existing print queue, go to the procedure for creating a printer.

3 From the [Available Options] menu, select [Print Queue Information], and then press the [Enter] key.

4 Press [Insert] key, and then enter a print queue name.

5 Press [Esc] key to return to the [Available Options] menu.

6 Set up the network connection to a printer.

7 On the [Available Options] menu, click [Print Server Information], and then press the [Enter] key.

8 To create a new print server, press the [Insert] key, and then enter a print server name.

For a currently defined print server, select a print server in the [Print Server] list.

Use the same printer name specified using NIB Setup Tool.

9 From the [Print Server Information] menu, select [Print Server Configuration].

10 From the [Print Server Configuration] menu, select [Printer Configuration].

11 Select the printer indicated as [Not Installed].

Use the same printer number specified as the remote printer number using NIB Setup Tool.

12 To change the printer name, enter a new name.

A name “Printer x” is assigned to the printer. The “x” stands for the number of the selected printer.

13 As type, select [Remote Parallel, LPT1].

The IRQ, Buffer size, Starting form, and Queue service mode are automatically configured.

14 Press the [Esc] key, and then click [Yes] on the confirmation message.

- 15** Press the [Esc] key to return to [Print Server Configuration Menu].
- 16** Assign print queues to the created printer.
- 17** From [Print Server Configuration Menu], select [Queues Served By Printer].
- 18** Select the printer created.
- 19** Press the [Insert] key to select a queue serviced by the printer.
You can select several queues.
- 20** Follow the instructions on the screen to make other necessary settings.
Following these steps, check that the queues are assigned.
- 21** Press the [Esc] key until “Exit?” appears, and then select [Yes] to exit PCONSOLE.
- 22** Start the print server by entering the following from the console of the NetWare server.
If the print server is in operation, quit and restart it.

❖ To quit

CAREE: unload pserver

❖ To start

CAREE: load pserver "print_server_name"



- ☐ If the printer works as configured, the message “Waiting for job” appears.

Setting Up as a Remote Printer (NetWare 4.x, 5/5.1, 6/6.5)

Follow the procedure below to use the printer as a remote printer under NetWare 4.x, 5/5.1 and 6.

★ Important

- ☐ To use the printer as a remote printer under NetWare 4.x/5/5.1, set it to NDS mode.
- ☐ Do not use the printer as a remote printer when Pure IP is used.

Setting up using NIB Setup Tool

- 1** Log on to the file server as an administrator or administrator equivalent.
- 2** Start NIB Setup Tool from [Start] menu.
- 3** Click [Property Sheet], and then click [OK].

4 Select a printer you want to configure.

5 Click [NetWare].

6 In the [Logon Mode] area, click [File Server Mode] or [NDS mode].

If [File Server Mode] is selected, the network connection is established based on the string you entered.

If [NDS mode] is selected, the network connection is established based on the string you entered.

7 In the [Print Server Name(P):] box, enter the name of the print server.

Use the same print server name in NWadmin. Enter up to 47 alphanumeric characters.

8 In the [File Server Name(F):] box, enter the name of the file server in which a print server is created.

You can also click [Browse...] to browse through available file servers. Enter up to 47 alphanumeric characters.

9 In the [NDS Tree(T):] box, enter the NDS tree name and create the file server.

You can also click [Browse...] to browse through available NDS trees and NDS contexts. Enter up to 32 alphanumeric characters. Hyphens and underscores can also be used.

10 In the [NDS Context(C):] box, enter a context in which the print server is created.

Enter up to 127 alphanumeric characters.

For context, object names from Root are entered from the lowest object, with each object separated by a period. For example, to create a print server in the NETWORK object under the organization object DS of Root, enter "NETWORK.DS".

11 In the [Print Server Option Mode] area, click [As Remote Printer(R)].

12 In the [Remote Printer No.(N)] box, enter the printer number. Use the same printer number created.

13 Click [OK] to close [NIB Setup Tool].

Setting up using NWadmin

1 From Windows, start NWadmin.

For details about NWadmin, see the NetWare manuals.

- 2** Set up the network connection to a print queue. Select the object in which the print queue is located in the directory tree, and then click [Create] on the [Object] menu.
- 3** In the [Class of new object] box, click [Print Queue], and then click [OK].
- 4** In the [Print Queue Name] box, enter the name of the print queue.
- 5** In the [Print Queue Volume] box, click [Browse].
- 6** In the [Available objects] box, click the volume in which the print queue is created, and then click [OK].
- 7** Check the settings, and then click [Create].
- 8** Set up the network connection to a printer. Select the object in which the printer is located, and then click [Create] on the [Object] menu.
- 9** In the [Class of new object] box, click [Printer], and then click [OK]. For NetWare 5, click [Printer (Non NDPS)].
- 10** In the [Printer name] box, enter the printer name
- 11** Select the [Define additional properties] check box, and then click [Create].
- 12** Assign print queues to the created printer. Click [Assignments], and then click [Add] in the [Assignments] area.
- 13** In the [Available objects] box, click the queue you created, and then click [OK].
- 14** Click [Configuration], click [Parallel] in the [Printer type] list, and then click [Communication].
- 15** Click [Manual load] in the [Communication type] area, and then click [OK]. Check the settings, and then click [OK].
- 16** Set up the network connection to a print server. Select a context specified using NIB Setup Tool, and then click [Create] on the [Object] menu.
- 17** In the [Class of new object] box, click [Print Server], and then click [OK]. For NetWare 5, click [Print Sever (Non NDPS)].
- 18** In the [Print Server Name] box, enter the print server name.
Use the same print server name specified using NIB Setup Tool.
- 19** Select the [Define additional properties] check box, and then click [Create].
- 20** Assign the printer to the created print server. Click [Assignments], and then click [Add] in the [Assignments] area.

21 In the [Available objects] box, click the queue you created, and then click [OK].

22 In the [Printers] area, click the printer you assigned, and then click [Printer Number].

23 Enter the printer number, and then click [OK]. Check the settings, and then click [OK].

Use the same printer number specified as the remote printer number using NIB Setup Tool.

24 Start the print server by entering the following from the console of the NetWare server.

If the print server is in operation, quit and restart it.

❖ To exit

```
CAREE: unload pserver
```

❖ To start

```
CAREE: load pserver "print_server_name"
```

Printing Files Directly from Windows

You can print files directly using Windows commands. For example, you can print PostScript files for PostScript 3.

❖ **Windows 95/98/Me**

You can print files directly using “ftp” command.

❖ **Windows 2000/XP, Windows Server 2003, Windows NT 4.0**

You can print files directly using “lpr”, “rcp” or “ftp” command.

Setup

Follow the procedure below to make network environment settings.

1 Enable TCP/IP with the control panel, and then set up the printer’s network environment about TCP/IP including IP addresses.

TCP/IP of the printer is set as default.

2 Install a TCP/IP in Windows to set up the network environment.

Consult the network administrator for the local setting information.

3 To print under Windows 2000/XP, Windows Server 2003, or Windows NT 4.0, install “Printing service for UNIX” as the network application. To print under Windows NT 4.0, install “Microsoft TCP/IP printing” as the network application.

 **Reference**

For details about setting up IP address, see Setup Guide.

For details about setting the IP address of the printer using DHCP, see [p.279 “Using DHCP”](#).

This completes the setup for specifying a printer using an IP address when printing. When using a host name to specify a printer, proceed to [p.245 “Using a Host Name Instead of an IP Address”](#) and continue the setup.

Using a Host Name Instead of an IP Address

When a host name is defined, you can specify a printer by host name instead of IP address. The host names vary depending on the network environment.

When using DNS

Use the host name set to the data file on the DNS server.

When setting the IP address of a printer using DHCP

Use the printer name on the configuration page as the host name.

Reference

For details about printing a configuration page, see [p.128 “Printing a Configuration Page”](#).

In other cases

Add the IP address and host name of the network printer to the hosts file on the computer used for printing. Methods of addition vary depending on operating systems.

Windows 95/98/Me

- 1** Copy `WINDOWSHOSTS.SAM` to the same directory and name it “`HOSTS`” with no extension.
- 2** Open the “`WINDOWSHOSTS`” file created using memo pad files, for instance.
- 3** Add an IP address and host name to the hosts file using the following format:

```
192.168.15.16 host # NP
```

“192.168.15.16” is the IP address, “host” is the printer's host name, and “#NP” is replaced by comments. Insert a space or tab between “192.168.15.16” and “host”, between “host” and “#NP” respectively, using one line for this format.
- 4** Save the file.

Windows 2000/XP, Windows Server 2003, Windows NT 4.0

- 1** Open the hosts file using memo pad files, for instance.

The hosts file is in the following folder:

```
WINNTSYSTEM32DRIVERSETHOSTS
```

“WINNT” is the directory of the installation destination for Windows 2000/XP, Windows Server 2003, and Windows NT 4.0.
- 2** Add an IP address and host name to the hosts file using the following format:

```
192.168.15.16 host # NP
```

“192.168.15.16” is the IP address, “host” is the printer's host name, and “#NP” is replaced by comments. Insert a space or tab between “192.168.15.16” and “host”, between “host” and “#NP” respectively, using one line for this format.

Save the file.

Printing Commands

The following explains printing operations using the “lpr”, “rcp”, and “ftp” commands.

Enter commands using the command prompt window. The location of the command prompts varies depending on operating systems:

- Windows 95/98
[Start] - [Programs] - [MS-DOS Prompt]
- Windows Me
[Start] - [Programs] - [Accessories] - [MS-DOS Prompt]
- Windows 2000
[Start] - [Programs] - [Accessories] - [Command Prompt]
- Windows XP, Windows Server 2003
[Start] - [All Programs] - [Accessories] - [Command Prompt]
- Windows NT 4.0
[Start] - [Programs] - [Command Prompt]

Note

- ☐ Match the data format of the file to be printed with the emulation mode of the printer.
- ☐ If the message “print requests full” appears, no print jobs can be accepted. Try again when sessions end. For each command, the amount of possible sessions is indicated as follows:
 - lpr: 10
 - rcp, rsh: 5
 - ftp: 3
- ☐ Enter the file name in a format including the path from the directory executing commands.

Reference

The “option” specified in a command is an intrinsic printer option and its syntax is similar to printing from UNIX. For details, see UNIX Supplement.

lpr

❖ When specifying a printer by IP address

```
c:> lpr -Sprinter's IP address [-Poption] [-ol] \pass
name\file name
```

❖ When using a host name instead of an IP address

```
c:> lpr -Sprinter's host name [-Poption] [-ol] \pass
name\file name
```

When printing a binary file, add the “-ol” option (lowercase O, and lowercase L).

When using a printer with the host name “host” to print a PostScript file named “file 1” located in the “C:\PRINT” directory, the command line is as follows:

```
c:> lpr -Shost -Pfiletype=RPS -ol C:\PRINT\file1
```

rcp

First, register the printer's host name in the hosts file.

```
c:> rcp [-b] \pass name\file name [pass name\file name...]
printer's host name:[option]
```



☐ In file names, “*” and “?” can be used as wild cards.

☐ When printing a binary file, add the “-b” option.

When using a printer with the host name “host” to print a PostScript file named “file 1” or “file 2” located in the “C:\PRINT” directory, the command line is as follows:

```
c:> rcp -b C:\PRINT\file1 C:\PRINT\file2 host:filetype=RPS
```



For details about registering the printer's host name in the hosts file, see [p.245 “Using a Host Name Instead of an IP Address”](#).

ftp

Use the “put” or “mput” command according to the number of files to be printed.

❖ When one file is printed

```
ftp> put \pass name\file name [option]
```

❖ When multiple files are printed

```
ftp> mput \pass name\file name [\pass name\file name...]
[option]
```

Follow the procedure below to print using the “ftp” command.

1 Formulate the printer's IP address or the host name of the hosts file printer as an argument and use the “ftp” command.

```
% ftp printer's IP address
```

2 Enter the user name and password, and then press the [# Enter] key.

User:

Password:

Contact your network administrator for information about the settings.

3 When printing a binary file, set the file mode to binary.

```
ftp> bin
```

When printing a binary file in ASCII mode, print may not come out correctly.

4 Specify files to be printed.

The following shows the examples of printing a PostScript file named “file 1” in the “C:\PRINT” directory and printing file 1 and file 2.

```
ftp> put C:\PRINT\file1 filetype=RPS
ftp> mput C:\PRINT\file1 C:\PRINT\file2
```

5 Quit ftp.

```
ftp> bye
```



- ☐ “=”, “,”, “_”, and “;” cannot be used for filenames. File names will be read as option strings.
- ☐ For “mput” command, option can not be defined.
- ☐ For “mput” command, “*” and “?” can be used as wild cards in file names.
- ☐ When printing a binary file in ASCII mode, print may not come out correctly.

Mac OS

This section explains how to configure a Mac OS to use EtherTalk and USB.

The following explains how to configure Mac OS 9.1. If you are not using Mac OS 9.1, see the manual of the Mac OS you are using for details.



For Mac OS 8.6 and higher. (Mac OS X Classic environment is supported.)



- ☐ The PostScript 3 printer driver is stored in the following folder on the CD-ROM.

Mac OS 8 and 9:PS Driver:(language):Disk1

Installing the PostScript 3 Printer Driver and PPD File

It is necessary to install a printer driver and PostScript Printer Description (PPD) files to print from a Mac OS.

Follow the procedure below to install a printer driver and a PPD file into a Mac OS using Mac OS 8.6 and higher.

PostScript 3 Printer Driver

- 1** Insert the CD-ROM into the CD-ROM drive.
- 2** Double-click the CD-ROM drive icon.
- 3** Double-click the [Mac OS 8 and 9] folder.
- 4** Double-click the [PS Driver] folder.
- 5** Double-click the folder of the language you use.
- 6** Open [DISK1], and then double-click the installer icon.
- 7** Follow the instructions on the screen.

PPD Files

- 1** Double-click the CD-ROM drive icon.
- 2** Double-click the [Mac OS 8 and 9] folder.
- 3** Double-click the [Printer Descriptions] folder.
- 4** Double-click the folder of the language you use.

- 5** Open the [DISK1] folder.
- 6** Drag the PPD file and the plugin file into [Printer Descriptions] in [Extensions] under [System Folder].
- 7** Restart the Mac OS.

Setting Up PPD Files

★ Important

- ☐ Make sure that the printers are connected to an AppleTalk network before performing the following procedure.

- 1** On the [Apple] menu, click [Chooser].
- 2** Click the Adobe PS icon.
- 3** In the [Select a PostScript Printer:] list, click the name of the printer you want to use.
- 4** Click [Create].
- 5** Click the printer you want to use, and then click [Select].

A PPD file is set up and the Adobe PS icon appears at the left of the printer name in the list. Follow the procedure on [p.252 “Setting Up Options”](#) to make option settings; otherwise close the [Chooser] dialog box.

Creating a Desktop Printer Icon

★ Important

- ☐ Make sure that printers are connected to the USB before performing the following procedure.

To use a printer connected by USB, create a desktop printer icon.

- 1** Double-click [Desktop Printer Utility] in the [AdobePS Components] folder.
- 2** Click [AdobePS] in [With:], click [Printer (USB)] in [Create Desktop], and then click [OK].
- 3** Click [Change] in [USB Printer Selection].
- 4** Select the model you are using in [Select a USB Printer:], and then click [OK].
- 5** Click [Auto Setup] in [PostScript™ Printer Description (PPD) File].
- 6** Click [Create].
- 7** Enter the printer name, and then click [Save].

The printer icon appears on the desktop.

8 Quit Desktop Printer Utility.

Setting Up Options

1 On the [Apple] menu, click [Chooser].

2 Click the Adobe PS icon.

3 In the [Select the PostScript Printer:] list, click the name of the printer you want to use, and then click [Setup].

4 Click [Configure].

A list of options appears.

5 Select the option you want to set up, and then select an appropriate setting for it.

6 Click [OK].

The list of options closes.

7 Click [OK].

The [Chooser] dialog box appears.

8 Close the [Chooser] dialog box.



- ☐ If the option you want to select is not displayed, PPD files may not be set up correctly. To complete the setup, check the name of the PPD file displayed in the dialog box.

Installing the ColorSync Profiles

ColorSync profiles enable a printer to print colors consistent with those on the computer display. You must install the ColorSync profile to use this function.

Follow the procedure below to install the ColorSync profiles.

1 Start a Mac OS.

2 Double-click the hard disk icon, and then open the appropriate folder for installing the ColorSync profiles.

The location of the appropriate folder may vary depending on the version of the Mac OS. The following are examples:

- System: Preferences: ColorSync profiles
- System: ColorSync profiles

3 Insert the CD-ROM into the CD-ROM drive.

The CD-ROM drive icon appears.

4 Double-click the CD-ROM drive icon.

The contents of the CD-ROM appear.

5 Double-click the [Mac OS 8 and 9] folder.**6 Double-click the [ColorSync™ Profiles] folder.****7 Drag the file to the [ColorSync™ Profiles] folder on the hard disk.**

The ColorSync profiles are installed.



- ☐ The ColorSync profiles are consistent with color characteristics defined by the International Color Consortium (ICC).
- ☐ For some computer displays, particular settings need to be created by ColorSync. For details, see the appropriate manuals for your computer display.

Installing Adobe Type Manager



- ☐ Quit all applications currently running before installation. Install ATM after you restart the computer.

1 Start a Mac OS.**2 Insert the CD-ROM into the CD-ROM drive.****3 Double-click the CD-ROM drive icon.****4 Double-click the [Mac OS 8 and 9] folder.****5 Double-click the [ATM] folder.****6 Double-click the ATM 4.6.3 installer icon.****7 Follow the instructions on the screen.****8 When the procedure is complete, restart the computer. ATM will be completely installed only after restarting.****9 On the [Apple] menu, open [Control Panel], and then click [-ATM].****10 The ATM control panel opens.**



- ☐ For details about installation, see the operating instructions in the ATM folder.

Installing Screen fonts

Follow the procedure below to install screen fonts.

The screen fonts described below can be found in the **[Fonts]** folder on the CD-ROM.

- 1 Start a Mac OS.**
- 2 Insert the CD-ROM into the CD-ROM drive.**
The CD-ROM drive icon appears.
- 3 Double-click the CD-ROM drive icon.**
The contents of the CD-ROM appear.
- 4 Double-click the [Mac OS 8 and 9] folder.**
- 5 Double-click the [Fonts] folder.**
- 6 Double-click the [Screen font] folder.**
- 7 Double-click the [TrueType] or [Type1] folder.**
Select the font type you want to use.
- 8 Copy the fonts you want to install in [Fonts] under [System Folder].**
A confirmation message appears.
- 9 Click [OK].**
The fonts are installed.
- 10 Restart the Mac OS.**

Changing to EtherTalk

Follow the procedure below to configure to a Mac OS to use EtherTalk.

- 1 Open [Control Panel], and then double-click the AppleTalk icon.**
- 2 On the [Connect via:] pop-up menu, click [Ethernet].**
- 3 If you change zones, select a name on the [Current zone:] pop-up menu.**
- 4 Close the AppleTalk control panel.**

5 Restart the computer.

Note

- ☐ The procedures used to configure Mac OS may vary depending on the Mac OS version. The following describes how to configure Mac OS 9.1. If you are using a different version of Mac OS, use the following procedures as a reference and see the manuals for your Mac OS version.
- ☐ Confirm the Connection to the Printer with TCP/IP

Reference

For information about installing applications required for EtherTalk, see the Mac OS manuals.

Mac OS X

This section explains how to configure a Mac OS X to use EtherTalk and USB. Follow the procedure below to configure Mac OS X 10.1. If you are not using Mac OS X 10.1, see the manual of the Mac OS X you are using for details.



❑ For Mac OS X 10.1 or higher.



❑ The PPD files are stored in the following folder on the CD-ROM.

Mac OS X:PPD Installer

Installing the PPD Files

Follow the procedure below to install a PPD file to print from Mac OS X.



❑ You need an administrator name and a password (phrase). For details, consult your network administrator.

- 1** Insert the CD-ROM into the CD-ROM drive.
- 2** Double-click the CD-ROM drive icon.
- 3** Double-click the [Mac OS X] folder.
- 4** Double-click the installer icon.
- 5** Follow the instructions on the screen.

Setting Up the PPD File

- 1** Start Print Center.
- 2** Click [Add Printer].
Click [AppleTalk] on the first pop-up menu.
If the zone is set, select the zone from the second pop-up menu.
- 3** Select the PPD file for the model you are using from the [Printer Model:] pop-up menu, and then click [Add].

Setting Up Options



- ☐ No printer option settings can be made under Mac OS X. No new settings for options not installed can be made.

Using USB Interface

Follow the procedure below to setup USB connection.

1 Start Print Center.

2 Click [Add].

3 Click [USB] on the pop-up menu.

The connected printer appears.

4 Select the printer, and then select its manufacturer from the [Printer Model:] pop-up menu.

A list of printer types appears.

5 Select the name of the connected printer from the list of printer models, and then click [Add].

6 Close the [Printer List] dialog box, and then quit Print Center.



- ☐ When printing with a USB connection to a Macintosh computer, printer language does not change automatically. Use the control panel on this printer to change printer language to **[Auto Detect]** or **[PS]** before printing.
- ☐ USB2.0 can be used only with Mac OS X 10.3.3 or higher.

Using Rendezvous

Follow the procedure below to print using Rendezvous under Mac OS X 10.2.3 or higher. Ethernet and wireless LAN connections can also be used.

1 Start Print Center.

2 Click [Add].

3 Click [Rendezvous] on the pop-up menu.

The connected printer appears.

4 Select the printer, and then select its manufacturer from the [Printer Model:] pop-up menu.

A list of printer types appears.

5 Select the name of the connected printer from the list of printer models, and then click [Add].

6 Close the [Printer List] dialog box, and then quit Print Center.



- ☐ When printing with a Rendezvous connection to a Macintosh computer, printer language does not change automatically. Use the control panel on this printer to change printer language to [Auto Detect] or [PS] before printing.

Changing to EtherTalk



- ☐ You need an administrator name and a password (phrase). For details, consult your network administrator

Follow the procedure below to configure a Mac OS X to use EtherTalk.



For information about installing applications required for EtherTalk, see the Mac OS manuals.

1 Open [System Preference], and then click the Network icon.

2 Click the [AppleTalk] tab.

3 Select the [Make AppleTalk Active] check box.

4 To change AppleTalk zones, select a name from the [AppleTalk Zone:] pop-up menu.

5 When the settings are made, click [Apple Now].

Configuring the Printer

Use the control panel to enable AppleTalk. (The default is active.)

Using PostScript 3

Job Type

You can select the type of print job.



☐ If you use Mac OS X, this function is not available.

❖ Normal

Select this for normal printing. The print job starts immediately after the print command is given.

❖ Sample Print

Use this function to print the first set of a multiple-set print job. After checking the results, the remaining sets can be printed using the control panel. This function can protect you from printing a large quantity of misprints.

❖ Locked Print

Use this function to print confidential documents. Documents will not be printed automatically unless a password is entered using the control panel.

Using Sample Print



- ☐ To use this function, the optional hard disk must be installed on the printer.
- ☐ The number of pages the printer can save varies depending on the contents of the print images. At most, the printer can save 30 jobs or 1,000 pages for Sample Print and Locked Print.
- ☐ If you turn off the power, the job saved on the hard disk will be deleted.
- ☐ Sample Print files will not appear on the display panel if they have already been executed or deleted using the Web browser before you select "Sample Print" from the control panel.
- ☐ Sample Print files printed or deleted using Web Image Monitor after you select **[Sample Print]** using the control panel will appear on the display panel. However, an error message will appear if you try to print or delete those Sample Print files.
- ☐ If you use Mac OS X, Sample Print function cannot be used.
- ☐ If the application has a collate option, make sure that it is not selected before sending a print job. By default, sample print jobs are automatically collated by the printer driver. If the collate option is selected in the application print dialog box, more prints than intended may be printed.

1 In an application, select the menu command to print.

The print dialog box appears.

2 On the pop-up menu, click [Job Log].

3 In [Job Type:], click [Sample Print], and then select the appropriate setting.

4 In [User ID:], enter the user ID using up to eight alphanumeric (a-z, A-Z, 0-9) characters.

Set this to identify the user associated with the job.

The user ID can consist of up to eight alphanumeric (a-z, A-Z, 0-9) characters.

5 After making the necessary settings you want, click [Print].

The Sample Print job is sent to the printer and one set is printed.

6 Check the sample print to confirm that the settings are correct.

If the settings are correct, print the remaining sets.

If not, you can delete the saved job.

Reference

For details about printing the remaining sets, see [p.103 “Printing the Remaining Sets”](#).

For details about deleting a Sample Print file, see [p.104 “Deleting a Sample Print File”](#).

Using Locked Print

Important

- ☐ To use this function, the optional hard disk must be installed on the printer.
- ☐ The number of pages the printer can save varies depending on the contents of the print images. At most, the printer can save 30 jobs or 1,000 pages for Sample Print and Locked Print.
- ☐ If you turn off the power, the job saved on the hard disk will be deleted.
- ☐ Locked Print files will not appear on the display panel if they have already been printed or deleted using Web Image Monitor before you select [**Locked Print**] using the control panel.
- ☐ Locked Print files printed or deleted using Web Image Monitor after you have selected [**Locked Print**] using the control panel will still appear on the display panel. However, an error message will appear if you try to print or delete those Locked Print files.
- ☐ If you use Mac OS X, Locked Print function cannot be used.
- ☐ If the application has a collate option, make sure that it is not selected before sending a print job. By default, locked print jobs are automatically collated by the printer driver. If the collate option is selected in the application print dialog box, more prints than intended may be printed.

☐ Print jobs are not saved on the hard disk in the following cases. You can check the error log for jobs not saved.

- When there are 30 Sample Print and Locked Print jobs saved on the hard disk.
- When the total number of pages saved on the hard disk exceeds 1,000 pages.

1 In an application, select the menu command to print.

The print dialog box appears.

2 On the pop-up menu, click [Job Log].

3 In [Job Type:], click [Locked Print], and then select the appropriate setting.

4 In [User ID:], enter the user ID using up to eight alphanumeric (a-z, A-Z, 0-9) characters, and then enter a 4-digit password in [Password:].

Set this to identify the user associated with the job.

5 After making the necessary settings you want, click [Print].

The Locked Print job is sent to the printer.

6 Enter the password using the control panel, and then specify whether to print or delete the job.



For details about entering the password, see [p.107 “Entering a Password”](#).

For details about deleting the job, see [p.108 “Deleting a Locked Print File”](#).

Duplex Printing

Use this function to select duplex printing.



- ☐ To use this function, the optional duplex unit must be installed on the printer.
- ☐ You cannot perform duplex printing when using the bypass tray.

❖ None

Disables duplex printing.

❖ Flip on Long Edge

Prints so you can open it to the long edge when bound along the long edge.

❖ Flip on Short Edge

Prints so you can open it to the short edge when bound along the short edge.



- ☐ Availability of these items varies depending on the operating system you are using. Click the button that means **[Flip on Long Edge]** or **[Flip on Short Edge]**.

Color Mode

Use this function to select whether the document is printed in color or black and white.

❖ Color

Prints color documents in full color.



- ☐ Color images are printed using CMYK toner, Cyan, Magenta, Yellow, and Black. CMYK represents the three primary subtractive colors.
 - ☐ If you want to adjust the print color, use the settings in the Advanced dialog box accessed from the Advanced button on the **[Print Quality]** tab.
- ### ❖ Black and White
- Prints everything, including color documents, in black and white. Black and White printing is faster than Color. To stop black and white areas being printed with CMYK toner, select **[Black and White]** in the printer driver as well as in the application.

Gradation

Use this function to select a type of gradation suited to your requirements.

❖ Fast

Prints quickly but loses smoothness.

❖ Standard

Prints with good gradation.

Color Profile

Use this function to select the color profile pattern.

❖ Auto

Use this setting to automatically configure the best color profile pattern based on the appearance of the document to be printed.

❖ Photographic

Use this setting to enhance reproduction of photos and graphics that include midtones.

❖ **Presentation**

Use this setting to enhance reproduction of documents containing text and graphics. This CRD is best for printing colored charts, graphs, presentation materials and so on. If you use this CRD for printing photographs, color and gradation might not reproduce so well.

❖ **Solid Color**

Use this setting to print specific single colors, logos and so on.

❖ **User Setting**

Use this setting to print images using a CRD downloaded from your application.

❖ **CLP Simulation**

Prints the output colors similar to the colors displayed on the computer screen.



- ☐ Use this function to select a color rendering dictionary (CRD). The CRD is referred to color matching, so you should select the appropriate CRD for the document you are printing. The selected CRD is also referred to when **[Fine]** or **[Super Fine]** is selected for “Color Setting”. The following items are available: **[Auto]**, **[Photographic]**, **[Presentation]**, and **[Solid Color]**.

Color Setting

Use this function to select the correction method used for color conversion.



- ☐ The color rendering dictionary selected in the Color Profile setting is used.

❖ **Off**

No modification to the color setting.

❖ **Fine**

Select this setting to perform color matching based on the printer's built-in color rendering dictionaries, and to perform CMYK conversion. This setting performs printing at an output target of Monitor $\gamma = 1.8$.

❖ **Super Fine**

Select this setting to use a color rendering dictionary similar to the Fine setting but is capable of producing output that is more vivid. Use this setting to emphasize lighter colors. This setting performs printing at an output target of Monitor $\gamma = 2.2$.



- ❑ Use this function to select a color rendering dictionary (CRD). The CRD is referred to color matching, so you should select the appropriate CRD for the document you are printing. The selected CRD is also referred to when **[Fine]** or **[Super Fine]** is selected for “Color Setting”. The following items are available: **[Auto]**, **[Photographic]**, **[Presentation]**, and **[Solid Color]**.

CMYK Simulation Profile

You can simulate the color tone of the printing ink.

You can select the printing ink standard from US OffsetPrint, Euroscale, Japan-Color and PaletteColor.

Dithering

Use this function to set the Image Rendering mode.

- ❖ **Photographic**
Performs dithering in an appropriate form for photographs.
- ❖ **Text**
Performs dithering in an appropriate form for text.

Gray Reproduction

Use this function to select Black Color mode for text and line art.

- ❖ **Black by K**
Select this setting to use a black toner.
- ❖ **Black/Gray by K**
Black portions are printed in gray.
- ❖ **CMY+K**
Select this setting to use all toners.

Color Matching

Use this function to select whether or not you want the colors in the documents to be adjusted before printing, so that the printed page matches the colors on the screen closer.

- ❖ **Image Color Control**
Open the **[Image Color Matching]** dialog box, and then click this button to specify exactly how you want the colors on your screen adjusted before printing.

Printer Utility for Mac

By using Printer Utility for Mac, you can download fonts, change the name of the printer and so on.

★ Important

- ❑ If a Macintosh and printer are connected by USB, you cannot use Printer Utility for Mac.

↓ Note

- ❑ Printer Utility for Mac is included on the CD-ROM labeled “Printer Drivers and Utilities”.
- ❑ Printer Utility for Mac requires Mac OS 7.6.1-9.x, or Mac OS X 10.1.x or 10.2.1. Mac OS X 10.0.x and 10.2 are not supported.

Installing Printer Utility for Mac

Follow these steps to install Printer Utility for Mac on the machine.

1 Start the Macintosh.

2 Insert the CD-ROM into the CD-ROM drive.

The CD-ROM icon appears.

3 Double-click the hard disk icon to open it.

4 Double-click the CD-ROM icon.

The contents of the CD-ROM appear.

5 Double-click the [Mac OS 8 and 9] folder.

↓ Note

- ❑ Under Mac OS X, double-click the [Mac OS X] folder.

6 Double-click the [PS Utility] folder on the CD-ROM.

7 Double-click the [Printer Utility for Mac] folder.

8 Double-click the folder of the language you use.

9 Move the “Printer Utility for Mac” file to the Macintosh hard disk using a drag-and-drop operation.

10 Drag the CD-ROM icon to the Trash to eject the CD-ROM.

Printer Utility for Mac is installed.

Starting Printer Utility for Mac

Mac OS

 **Important**

- ☐ Before starting Printer Utility for Mac, make sure the printer is selected in **[Chooser]** on the Apple menu.

1 Double-click the Printer Utility for Mac icon.

The [Printer Utility for Mac] dialog box appears.

2 Click [OK].

Printer Utility for Mac will take a few seconds to start.

Mac OS X

1 Double-click the Printer Utility for Mac icon.

The [Printer Utility for Mac] dialog box appears.

2 Click [OK].

3 In the [Available Printers:] box, select the printer you want to use.



- ☐ If you change zones, select a name from **[Available Network Zones:]**.
- ☐ Click **[Choose Printer...]** on the Printer Utility for Mac menu if you want to change the printer.

4 Select the printer you want to use.

Printer Utility for Mac will take a few seconds to start.

5 Click [Choose].

Printer Utility for Mac Functions

Downloading PS Fonts

You can download the PS fonts to the printer memory or hard disk drive.

 **Important**

- ☐ The following procedure to download the fonts assume that you are a system administrator. If you are not, be sure to consult your system administrator.
- ☐ During the download, do not turn off the power switch, operate the panel or open or close the cover.
- ☐ If the printer restarts, all the printer settings return to the defaults.

☐ Confirm that a Macintosh and the printer are connected with Appletalk.

1 Select [Download PS Fonts...] on the [File] menu.

2 Click [Add to list].

The dialog box to select fonts appears.

3 Select the desired font files, and then click [Open].

The list of selectable font names appears.

4 After adding all the fonts you want to download, click [OK].

The dialog box of selected fonts to download appears.

5 Click [Download].

The fonts begin to download, and the download status is shown.

6 When the completion message appears, click [OK].

7 Click [Cancel].



☐ Some fonts cannot be downloaded.

☐ Before downloading, read the documentation about the fonts you want to use.

Displaying Printer Fonts

You can display the available fonts currently downloaded to the printer. Fonts in the printer memory and hard disk drive can be displayed.

1 Select [Display Printer's Fonts...] on the [File] menu.

A dialog box appears.

2 Select [Printer's memory] or [Printer's disk].

3 Click [OK].



☐ The fonts displayed in italics are the default fonts.

Deleting Fonts

You can delete fonts from the printer memory or hard disk drive.



☐ You cannot delete the fonts displayed in italic.

1 Select [Display Printer's fonts] on the [File] menu.

A dialog box appears.

2 Select [Printer's memory] or [Printer's disk].

3 Select the fonts you want to delete.

4 Click [Delete].

A confirmation message appears.

5 Confirm the fonts you want to delete and the printer name from which you want to delete the fonts.

6 Click [Continue], and then click [OK].

7 Click [OK].

Initializing the Printer Disk

When initializing the printer hard disk, all the fonts downloaded to the printer hard disk drive are deleted. Before initializing, be sure to check the fonts on the hard disk drive.

★ Important

- ☐ When initializing the printer hard disk drive from the control panel, all of the data on the printer hard disk drive is deleted. Before initializing, be sure to check the data on the hard disk drive.
- ☐ Do not turn off the power switch until initializing is completed, otherwise the hard disk drive might be damaged.

1 Select [Initialize Printer's Disk...] on the [File] menu.

The confirmation message appears. To cancel initialization, click [Cancel].

2 Click [Execute].

Initializing starts.

3 When the completion message appears, click [OK].

Page Setup

You can set the paper size on which to print "Print Fonts Catalogue" and "Prints Fonts Sample".

1 Select [Page Setup...] on the [File] menu.

2 Select the paper size.

Printing Font Catalog

You can print the names of fonts available on the printer.

1 Select [Print Fonts Catalogue] on the [File] menu.

2 Click [Print].

- ☐ The paper selected under **[Page Setup]** is used.

Printing Font Sample

You can print samples of fonts downloaded to the hard disk drive or memory.

1 Select [Print Fonts Sample...] on the [File] menu.**2 Click [Print].**

- ☐ Print by using the paper selected on **[Page Setup]**.

Renaming the Printer

You can change the printer name displayed under Appletalk. If you connect several printers on the network, assign different names so you can identify them. If several printers have the same name, a digit appears next to the printer name in **[Chooser]**.



- ☐ You can enter up to 31 digits and letters.
- ☐ Do not use symbols, for example "*", ".", "=", "@", "~".

Mac OS

1 On the [File] menu, click [Rename Printer...].**2 In the [New Name:] field enter a new name.****3 Click [Rename].**

The printer name is changed.

4 Click [OK].**5 On the Apple menu, click [Chooser].****6 Click the [AdobePS] icon.****7 Select the printer whose name you changed, and then close the [Chooser] dialog box.**

- ☐ If there are several Appletalk zones, select the zone the machine belongs to.

Mac OS X

1 On the [File] menu, click [Rename Printer...].

2 In the [New Name:] field enter a new name.

3 Click [Rename].

The printer name is changed.

4 Click [OK].

5 On the [Printer Utility for Mac] menu, click [Choose Printer...].

6 In the [Available Network Zones:] list, select the zone for the Macintosh in use.

7 In the [Available Printers:] list, select the printer whose name you changed, and then click [Choose].

Restarting the Printer

You can restart the printer.

1 Select [Restart Printer] on the [File] menu.

2 Confirm the message that appears on the screen, and then click [Restart].

The printer restarts.



- ☐ The fonts downloaded in the printer memory will be deleted.
- ☐ If the printer restarts, all the printer settings return to the defaults.

Downloading PostScript Files

You can download a Postscript file to the printer.

1 Select [Download PostScript File...] on the [Utility] menu.

2 Select the file name to download, click the file name, and then click [Open].

3 Type the log file name, and then click [Save].

The selected file is downloaded.



- ☐ Errors are recorded in the log file.

Selecting the Zone

You can change the zone to which the printer belongs under Appletalk.



- ❑ Confirm that a Macintosh and printer are connected with Appletalk.

Mac OS

- 1** On the [Utility] menu, click [Select Zone...].

The zone to which the printer belongs and the available zone list appear.

- 2** Select the zone in which you want to locate the printer, and then click [Change].

A confirmation message appears.

- 3** Click [Continue].

A confirmation message appears.

- 4** Click [OK].

- 5** On the Apple menu, click [Chooser].

- 6** Click the [AdobePS] icon.

- 7** In the [Appletalk zone:] list, select the zone you changed.

- 8** In the [Select a PostScript Printer:] list, select the printer you want to use.

- 9** Close the [Chooser] dialog box.

Mac OS X

- 1** On the [Utility] menu, click [Select Zone...].

The zone to which the printer belongs and the available zone list appear.

- 2** Select the zone which you want to locate the printer in, and then click [Change].

A confirmation message appears.

- 3** Click [Continue].

A confirmation message appears.

- 4** Click [OK].

- 5** On the [Printer Utility for Mac] menu, click [Choose Printer...].

- 6** In the [Available Network Zones:] list, select the zone you changed.

- 7** In the [Available Printers:] list, select the model of printer in use, and then click [Choose].

Displaying the Printer Status

You can display and confirm the current status of the printer.

1 Select [Display Printer Status...] on the [Utility] menu.

The current status of the printer appears.

2 Confirm the current status of the printer.

You can confirm the memory capacity, the VM (Virtual Memory) space, the hard disk drive status and available space on the hard disk drive. You can also confirm the zone to which the printer belongs.

3 Click [OK].

Launching the Dialogue Console

You can create and edit a PostScript file for printing, and then download it to the printer.



- ☐ “Launch Dialogue Console” is recommended for users with an understanding of PostScript.
- ☐ Do not download any file other than PostScript files to the printer.
- ☐ “Launch Dialogue Console” must be used at your own responsibility.

1 Select [Launch Dialogue Console...] on the [Utility] menu.

Open the editing screen. The Dialogue Console menu bar appears.

2 Type the PostScript command in the editor screen.

To edit a PostScript file, select [Open] on the [File] menu to open it.

You can search or replace a character string by using the [Search] menu.

3 After editing the PostScript file, select [Download Top Window] on [Console] menu to start printing.

The PostScript file is sent to the printer.

The [Reply from Printer] box opens, depending on the PostScript file you sent.

4 Select [Return To Main Menu] on the [Console] menu to close the PostScript file.

Software and Utilities Included on the CD-ROM

The following softwares and utilities are included in the CD-ROMs that come with the printer.

❖ **Font Manager 2000**

For installing new screen fonts, or organizing and managing fonts already in the system. For details about Font Manager 2000, see the manual on the CD-ROM labeled “Printer Drivers and Utilities”.

❖ **SmartDeviceMonitor for Admin**

For the system administrator to manage network printers.



SmartDeviceMonitor for Admin Help.

❖ **SmartDeviceMonitor for Client**

For users to manage their network print status.



SmartDeviceMonitor for Client Help.

❖ **1394 Utility**

For the optional IEEE 1394 interface unit. For details, see the Readme file or the manual provided with the optional IEEE 1394 interface unit.

❖ **USB Printing Support**

For connection to Windows 98 SE/Me computers via USB.

Viewing the contents of the CD-ROM

Follow the procedure below to view the contents of the CD-ROM.

1 Insert the CD-ROM into the CD-ROM drive.

The installer starts.

2 Click [Browse This CD-ROM].

Explorer starts and displays the contents of the CD-ROM.

Printer Drivers for This Printer

Printing requires installing a printer driver appropriate to your operating system. The following drivers are included on the CD-ROM provided with this printer.

❖ PCL 5c/6 printer driver

This printer driver allows the computer to communicate with the printer via a printer language.

The following operating system is supported.

- Windows 95/98/Me, Windows 2000/XP, Windows Server 2003, and Windows NT 4.0



- ☐ For Windows NT 4.0, Service Pack 6 or higher is required.
- ☐ You can only print in black and white with PCL 5c driver.

❖ RPCS printer driver

This printer driver allows the computer to communicate with the printer using a printer language. In addition to the conventional user interface, another pre-set user interface is provided.

The following operating system is supported.

- Windows 95/98/Me, Windows 2000/XP, Windows Server 2003, and Windows NT 4.0



- ☐ For Windows NT 4.0, Service Pack 6 or higher is required.

❖ PostScript Printer Drivers and PPD files

PostScript printer drivers and the PPD files are included on the CD-ROM provided with this printer. PostScript printer drivers allow the computer to communicate with the printer using a printer language. PPD files allow the printer driver to enable specific printer functions.

The following operating system is supported.

- Windows 95/98/Me, Windows 2000/XP, Windows Server 2003, Windows NT 4.0, Mac OS, and Mac OS X



- ☐ The PostScript printer drivers and PPD files are included on the CD-ROM labeled "Printer Drivers and Utilities".
- ☐ For Mac OS, version 8.6 or higher is required. (Mac OS X Classic environment is supported.)

❖ PPD files

PPD files are included on the CD-ROM provided with this printer. PPD files allow the printer driver to enable specific printer functions.

SmartDeviceMonitor for Admin

SmartDeviceMonitor for Admin is an application that uses TCP/IP and IPX/SPX to monitor network printers. It can monitor multiple network printers using IP address. We recommend that network administrators use this application.

❖ **File path**

SmartDeviceMonitor for Admin is stored in the following folder on the CD-ROM.

NETWORKDEVMONADMINDISK1

| Operating system | Protocol stack |
|---------------------|--|
| Windows 95/98/Me | TCP/IP provided with Windows 95/98/Me IPX/SPX provided with Windows 95/98/Me NetWare Client provided with Windows 95/98 Novell Client provided with Windows 95/98 |
| Windows 2000 | TCP/IP provided with Windows 2000 IPX/SPX provided with Windows 2000 NetWare Client provided with Windows 2000 Novell Client provided with Windows 2000 or Windows NT |
| Windows XP | TCP/IP provided with Windows XP IPX/SPX provided with Windows XP NetWare Client provided with Windows XP Novell Client provided with Windows XP |
| Windows Server 2003 | TCP/IP provided with Windows Server 2003 IPX/SPX provided with Windows Server 2003 NetWare Client provided with Windows Server 2003 Novell Client provided with Windows Server 2003 |
| Windows NT 4.0 | TCP/IP provided with Windows NT IPX/SPX provided with Windows NT Client Service for NetWare provided with Windows NT Novell Client provided with Windows 2000 or Windows NT |

❖ **Available functions**

SmartDeviceMonitor for Admin has the following functions to check:

- printer supplies such as paper or toner;
- results of print jobs executed from the computer.

 **Reference**

For information about using SmartDeviceMonitor for Admin, see SmartDeviceMonitor for Admin Help.

SmartDeviceMonitor for Client

SmartDeviceMonitor for Client has the following functions. We recommend that users install this application.

- Printing in a peer-to-peer network, using TCP/IP, and IPP from Windows 95/98/Me/2000/XP, Windows Server 2003, and Windows NT 4.0.
- Constantly monitoring the status of devices on the network using TCP/IP and IPX/SPX.

❖ File path

SmartDeviceMonitor for Client is stored in the following folder on the CD-ROM.

NETWORKDEVMONCLIENTDISK1

| Operating system | Protocol stack |
|---------------------|--|
| Windows 95/98/Me | TCP/IP provided with Windows 95/98/Me IPX/SPX provided with Windows 95/98/Me NetWare Client provided with Windows 95/98/Me Novell Client provided with Windows 95/98/Me |
| Windows 2000 | TCP/IP provided with Windows 2000 IPX/SPX provided with Windows 2000 NetWare Client provided with Windows 2000 Novell Client provided with Windows 2000 or NT |
| Windows XP | TCP/IP provided with Windows XP IPX/SPX provided with Windows XP NetWare Client provided with Windows XP Novell Client provided with Windows XP |
| Windows Server 2003 | TCP/IP provided with Windows Server 2003 IPX/SPX provided with Windows Server 2003 NetWare Client provided with Windows Server 2003 Novell Client provided with Windows Server 2003 |
| Windows NT 4.0 | TCP/IP provided with Windows NT IPX/SPX provided with Windows NT Client Service for NetWare provided with Windows NT Novell Client provided with Windows 2000 or Windows NT |

❖ Available functions

SmartDeviceMonitor for Client has the following functions.

- Peer-to-peer print function
 - Prints directly on the network printer without sending any data to a print server.
 - Prints on a substitute printer when there are too many jobs waiting on the specified printer, or when an error disables printing (Recovery Printing).
 - Allocates multiple print jobs to multiple printers (Parallel Printing).

- Executes prior group registration of printers specified for Recovery Printing or Parallel Printing.
- Notification function
 - Displays an error message when there is an error on the specified printer while transferring or printing data.
 - Notifies a print completion. You can also be notified of the print condition, such as displaying the notice only when Recovery Printing is executed.
- Monitoring function
 - Checks printer supplies such as paper or toner.
 - Simultaneously monitors multiple printers in use.
 - Checks the printer's network settings and detailed information of printers.
 - Enables you to check the print job log using the user ID

★ Important

- ☐ For Recovery Printing or Parallel Printing, the options on the printers must be the same. If a necessary option is not installed, a printer cannot be used for Recovery Printing or Parallel Printing.
- ☐ For Recovery Printing or Parallel Printing, the paper loaded in the printers must be the same. When a tray is selected for printing, load the same paper in that tray in all printers.
- ☐ For Recovery Printing or Parallel Printing, the print results may be different if the printers are not the same model or have exactly the same options.
- ☐ If you select Sample Print or Locked Print, you cannot select Recovery Printing or Parallel Printing.

📖 Reference

For details about using SmartDeviceMonitor for Client, see SmartDeviceMonitor for Client Help.

Cautions to Take When Using in a network

Connecting a Dial-up Router to a Network

When the NetWare file server and printer are on opposite sides of a router, packets are sent back and forth, causing communication charges to be incurred. Because packet transmission is a specification of NetWare, you need to change the configuration of the router. If the network you are using does not allow you to configure the router, configure the printer instead.

Configuring the router

Filter packets so that they do not pass over the dial-up router.



- ☐ The MAC address of the printer doing the filtering is printed on the printer configuration page. For details about printing a configuration page, see [p.128 "Printing a Configuration Page"](#).
- ☐ For details about configuring the printer if the router cannot be configured, see the instructions below.

Configuring the printer with NetWare

- 1** Configure the file server.
- 2** Set the frame type for a NetWare environment.



For details about selecting a frame type, see [p.147 "Frame Type \(NW\)"](#).

Configuring the printer without NetWare

- 1** When not printing, the network interface board sends packets over the network. Set NetWare to "inactive".



For details about selecting protocols, see [p.147 "Active Protocol"](#).

Using DHCP

This printer can be used in a DHCP environment. In a WINS server environment, the printer name can simultaneously be registered with a WINS server.

Note the following points when an Ethernet interface and an IEEE 1394 (IP over 1394) interface are simultaneously installed.

❖ **When static IP addresses are set for each interface**

- IP address: When set at the same value, the Ethernet interface is preferred.
- Subnet mask: When a value overlaps, the Ethernet interface is preferred.
- Gateway address: The value set is used. For the gateway address, set the gateway address located in the subnetwork set by the interface. If the value is outside the subnet range set by the interface, it operates as “0.0.0.0”.

❖ **When each setting is acquired from the DHCP server**

- IP address, subnet mask: Set for each value leased by the DHCP server operating on a connected interface. When overlapping IP addresses or identical IP addresses in the subnetwork are set, only the highest priority active value is set for the interface.

↓ Note

☐ The default priority interface is Ethernet.

- AutoNet: An automatic private address (169.254. xxx.xxx) is set for high priority interfaces.

↓ Note

☐ The default priority interface is IEEE 1394 (IP over 1394).

- Gateway address, DNS server address, domain name: Settings are made for DHCP-acquired values that have the highest interface priority. If the gateway address is outside the subnetwork range set by the interface, it operates as “0.0.0.0”.

↓ Note

☐ The default priority interface is Ethernet.

❖ **When the settings of the static IP addresses and the DHCP acquired value overlap**

- IP address, subnet mask: When the static IP address and DHCP-acquired value (IP address) are the same, or the static subnet mask value and DHCP-acquired subnet mask value overlap, the interface set by the static IP address is available using its value set. The interface set by DHCP is reset to the default.
- Gateway address: Use the manually set value.
- If a gateway address is set outside the interface subnetwork range, it operates as “0.0.0.0”.

↓ Note

☐ When the static IP address is not set, or is set as “0.0.0.0”, the interface setting the DHCP-acquired value is activated.

↓ Note

- ☐ Supported DHCP server operating systems are: Windows 2000 Server, Windows NT 4.0 Server Service Pack 4 or higher, NetWare, and UNIX standard.

- ❑ The IP address acquired from DHCP can be checked on the configuration page. For information about printing a configuration page, see [p.128 “Printing a Configuration Page”](#).
- ❑ When using WINS server, set the WINS server as shown on [p.281 “Configuring the WINS Server”](#).
- ❑ Under the WINS server, host names can be used for remote network printer ports.
- ❑ If you are not using the WINS server, reserve the printer's IP address in the DHCP server so the same IP address is assigned every time.
- ❑ When there are multiple DHCP servers, make the same reservation for all. This printer uses information from the DHCP server that responds first.
- ❑ The DHCP relay-agent is not supported. If you are using the DHCP relay-agent on an ISDN line network, expensive line charges will be incurred. This is because your computer connects to the ISDN line whenever a packet is transferred from the printer.

Using AutoNet

If the printer IP address is not assigned by a DHCP server automatically, a temporary IP address starting with 169.254, which is not used on the network, can be automatically selected by the printer.

You must change this setting to “on” to use AutoNet.

Reference

See [p.183 “autonet”](#).

Note

- ❑ The DHCP-assigned IP address has priority over that selected by AutoNet. The printer reboots at this time, and is temporarily unable to print.
- ❑ You can check the current IP address on the configuration page. For details about printing a configuration page, see [p.128 “Printing a Configuration Page”](#).
- ❑ When AutoNet is running, the printer name is not registered on the WINS server.
- ❑ No communication can take place except between units started up using AutoNet. However, communication can take place with Macintosh computers running Mac OS X 10.2.3 or higher versions.

Configuring the WINS Server

The printer can be configured to register its NetBIOS name with a WINS server when the power is turned on. This enables the NetBIOS name of the printer to be specified from SmartDeviceMonitor for Admin even in a DHCP environment.

This section explains configuring the WINS server.



- ☐ The WINS server is supported with Windows NT 4.0 Server Service Pack 4 or higher, and Windows 2000 Servers WINS Manager.
- ☐ For details about the WINS server settings, see Windows Help.
- ☐ If there is no reply from the WINS server, the NetBIOS name is registered by broadcast.
- ☐ The NetBIOS name can be entered using up to 13 alphanumeric characters.

Using Web Image Monitor

- 1 Start a Web browser.**
- 2 Enter “http: //(printer's address)” in the address bar to access the printer whose settings you want to change.**
Top Page of Web Image Monitor appears.
- 3 Click [Login].**
The dialog box for entering the user name and password appears.
- 4 Enter the user name and password, and then click [OK].**
Contact your network administrator for information about the settings.
- 5 In the left area, click [Configuration], and then click [Network].**
- 6 Click [TCP/IP].**
- 7 Check that [Enable] is selected for [WINS] in the [Ethernet+IEEE 802.11b] column, and then enter the WINS server IP address in [Primary WINS Server] and [Secondary WINS Server].**



- ☐ When installing the optional expansion 1394 board and using IP over 1394 simultaneously, perform the same operations in the **[IP over 1394]** column.

- 8 Click [Apply].**
- 9 Quit Web Image Monitor.**

Using telnet

See [p.181 “Using telnet”](#).

Using the Dynamic DNS Function

Dynamic DNS is a function which dynamically updates (registers and deletes) records (A record and PTR record) managed by the DNS server. When a DNS server is part of the network environment to which this printer, a DNS client, is connected, records can be dynamically updated using this function.

Updating

Updating procedure varies depending on whether the printer IP address is static or acquired by DHCP.



- ☐ When the dynamic DNS function is not used, records managed by the DNS server must be updated manually, if the printer's IP address is changed.
- ☐ To update the record using the printer, the DNS server has to have one of the following:
 - No security settings made.
 - If security settings are made, an IP-specified client (this printer) permits updating.

❖ For a static IP setting

If the IP address or host name is changed, the A and PTR records are updated.

If the A record is registered, CNAME is also registered. CNAMEs that can be registered are as follows:

- Ethernet and IEEE 802.11b
RNPXXXXXX (XXXXXX represents the last 3 hexadecimal bytes of the MAC address)
- IEEE 1394
RNPXXXXXXXXXX (XXXXXXXXXX represents the lower 3-7 bytes of the MAC Address in hexadecimal)

❖ For DHCP settings

As a substitute for the printer, the DHCP server updates the record, and one of the following occurs:

- When the printer acquires the IP address from the DHCP server, the DHCP server updates the A and PTR records.
- When the printer acquires the IP address from the DHCP server, the printer updates the A record, and the DHCP server updates the PTR record.

If the A record is registered, CNAME is also registered. CNAMEs that can be registered are as follows:

- Ethernet and IEEE 802.11b
RNPXXXXXX (XXXXXX represents the last 3 hexadecimal bytes of the MAC address)

- IEEE 1394
RNPXXXXXXXXXX (XXXXXXXXXX represents the lower 3-7 bytes of the MAC Address in hexadecimal)



- ❑ Dynamic update using message authentication (TSIG, SIG(0)) is not supported.

DNS servers targeted for operation

❖ For static IP setting

- Microsoft DNS servers with standard Windows 2000 Server/Windows Server 2003 features
- BIND 8.2.3 or higher

❖ For DHCP setup, when the printer updates the A record

- Microsoft DNS servers with standard Windows 2000 Server/Windows Server 2003 features
- BIND 8.2.3 or higher

❖ For DHCP setup, when the DHCP server updates records

- Microsoft DNS servers with standard Windows 2000 Server/Windows Server 2003 features
- BIND 8.2.3 or higher
- DNS servers with standard NetWare 5 (or a higher version) features

DHCP servers targeted for operation

As a substitute for the printer, DHCP servers capable of updating the A record and PTR record are as follows:

- Microsoft DHCP servers with standard Windows 2000 Server (Service Pack 3 or higher versions)/Windows Server 2003 features
- ISC DHCP 3.0 or higher
- DHCP server with standard NetWare 5 features

Setting the dynamic DNS function

Make settings with telnet using the “dns” command. For details, see [p.186 “dns”](#).

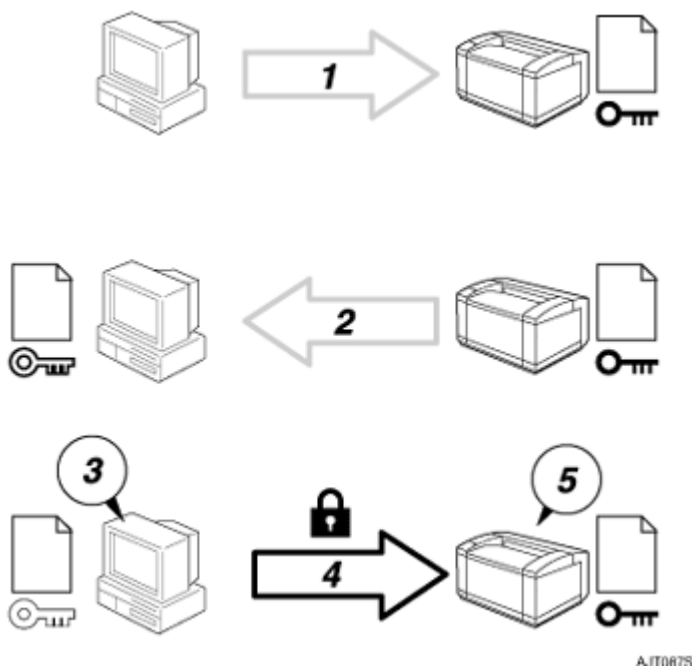
Configuring SSL Encryption

This section describes how to configure SSL (secure sockets layer) encryption.

SSL (Secure Sockets Layer) Encryption

To protect the communication path and establish encrypted communication, create and install the server certificate.

There are two ways of installing a server certificate: create and install a self-certificate using the machine, or request a certificate from a certificate authority and install it.



❖ Configuration flow (self-signed certificate)

- ① Creating and installing the server certificate
Install the server certificate using Web Image Monitor.
- ② Enabling SSL
Enable the [SSL/TLS] setting using Web Image Monitor.

❖ Configuration flow (certificate issued by a certificate authority)

- ① Creating the server certificate
Create the server certificate using Web Image Monitor.
The application procedure after creating the certificate depends on the certificate authority. Follow the procedure specified by the certificate authority.
- ② Installing the server certificate

Install the server certificate using Web Image Monitor.

③ **Enabling SSL**

Enable the **[SSL/TLS]** setting using Web Image Monitor.

To confirm whether SSL configuration is enabled, enter `http://(machine's-address)` in your Web browser's address bar to access this machine. If the "The page cannot be displayed" message appears, check the configuration as the SSL configuration is invalid.

Creating and Installing the Self-Signed Certificate

Create and install the server certificate using Web Image Monitor.

This section explains the use of a self-certificate as the server certificate.

1 Open a Web browser.

2 Enter "http://(printer's-address)/" in the address bar to access the printer.

3 Select Administrator mode.



For details about selecting Administrator mode in Web Image Monitor, see [p.164 "Access in the Administrator Mode"](#).

4 Click [Configuration], then click [Security], and then click [Certificates].

5 Click [Create].

6 Make the necessary settings.

- **Common Name:** Enter the server certificate common name, using up to 64 characters (required). The common name cannot include any spaces, and is case sensitive. The default is the IP address of the interface board in use.
- **Organization:** Enter the full name of your company, using up to 64 characters (optional). The organization name cannot include any spaces, and is case sensitive.
- **Organizational Unit:** Enter the section of your company that is requesting the certificate, using up to 64 characters (optional). The organization unit name cannot include any spaces, and is case sensitive.
- **City/Locality:** Enter the city/locality in which the device is located, using up to 128 characters (optional). The city/locality name cannot include any spaces, and is case sensitive.
- **State/Province:** Enter the state/province in which the device is located, using up to 128 characters (optional). The state/province name cannot include any spaces, and is case sensitive.
- **Country Code:** Enter the country in which the device is located, using two-letter ISO 3166 abbreviation of the country (required).

- **Validity Period:** Enter the period of time for which the server certificate is valid, in years. The default is one year.
- **Validity Start Date:** Enter the start date of the validity of the server certificate. The default is the current date obtained from the internal clock of the computer that is accessing Web Image Monitor.

7 Click [OK].

[Installed] appears under [Certificate Status] to show that a server certificate for the printer has been installed.



- ☐ Click [Delete] to delete the server certificate from the printer.

Creating the Server Certificate (Certificate Issued by a Certificate Authority)

Create the server certificate using Web Image Monitor.

This section explains the use of a certificate issued by a certificate authority as the server certificate.

1 Open a Web browser.

2 Enter “http://(printer's-address)/” in the address bar to access the printer.

3 Select Administrator mode.



For details about selecting Administrator mode in Web Image Monitor, see [p.164 “Access in the Administrator Mode”](#).

4 Click [Configuration], then click [Security], and then click [Certificates].

The [Certificate Information] page appears.

5 Click [Request].

6 Make the necessary settings.

- **Common Name:** Enter the server certificate common name, using up to 64 characters (required). The common name cannot include any spaces, and is case sensitive. The default is the IP address of the interface board in use.
- **Organization:** Enter the full name of your company, using up to 64 characters (optional). The organization name cannot include any spaces, and is case sensitive.
- **Organizational Unit:** Enter the section of your company that is requesting the certificate, using up to 64 characters (optional). The organization unit name cannot include any spaces, and is case sensitive.
- **City/Locality:** Enter the city/locality in which the device is located, using up to 128 characters (optional). The city/locality name cannot include any spaces, and is case sensitive.

- **State/Province:** Enter the state/province in which the device is located, using up to 128 characters (optional). The state/province name cannot include any spaces, and is case sensitive.
- **Country Code:** Enter the country in which the device is located, using two-letter ISO 3166 abbreviation of the country (required).
- **Validity Period:** Enter the period of time for which the server certificate is valid, in years. The default is one year.
- **Validity Start Date:** Enter the start date of the validity of the server certificate. The default is the current date obtained from the internal clock of the computer that is accessing Web Image Monitor.

7 Click [OK].

[Requesting] appears under **[Certificate Status]**.

Use the data in the **[Certificate Request Contents:]** dialog box to apply to the certificate authority.

8 Apply to the certificate authority for the server certificate.

The application procedure depends on the certificate authority. For details, contact the certificate authority.

When applying, use the data created with Web Image Monitor.



- ☐ By using Web Image Monitor, you can create the contents of the server certificate but you cannot send the application.
- ☐ Click **[Cancel Request]** to cancel the request for the server certificate.

Installing the Server Certificate (Certificate Issued by a Certificate Authority)

Install the server certificate using Web Image Monitor.

This section explains the use of a certificate issued by a certificate authority as the server certificate.

Enter the server certificate contents issued by the certificate authority.

1 Open a Web browser.

2 Enter “http://(printer's-address)/” in the address bar to access the printer.

3 Select Administrator mode.



For details about selecting Administrator mode in Web Image Monitor, see [p.164 “Access in the Administrator Mode”](#).

4 Click [Configuration], then click [Security], and then click [Certificates].

The **[SSL Certificate]** page appears.

5 Click [Install].

6 Enter the contents of the server certificate.

In the displayed field, enter the contents of the server certificate issued by the certificate authority.



For details about the displayed items and selectable items, see Web Image Monitor Help.

7 Click [OK].

[Installed] appears under [Certificate Status] to show that a server certificate for the printer has been installed.

Enabling SSL

After installing the server certificate in the printer, enable the SSL setting.

This procedure is used for a self-signed certificate or a certificate issued by a certificate authority.

1 Open a Web browser.

2 Enter "http://(printer's-address)/" in the address bar to access the printer.

3 Select Administrator mode.



For details about selecting Administrator mode in Web Image Monitor, see [p.164 "Access in the Administrator Mode"](#).

4 Click [Configuration], then click [Security], and then click [SSL/TLS].

The [SSL/TLS Settings] page appears.

5 Click [Enable] for [SSL/TLS].

6 Click [Apply].

The SSL setting is enabled.



- ☐ When using SSL, enter "http://(machine's-address)/" to access the printer. For this to work, Internet Explorer 5.5 or later, or Netscape 7.0 or later must be installed on your computer.

User Settings for SSL (Secure Sockets Layer)

If you have installed a server certificate and enabled SSL (Secure Sockets Layer), you need to install the certificate on the user's computer.

The administrator must explain the procedure for installing the certificate to users.

If a warning dialog box appears while accessing the machine using the Web browser or IPP, start the Certificate Import Wizard and install a certificate.

1 When the [Security Alert] dialog box appears, click [View Certificate].

The [Certificate] dialog box appears.

To be able to respond to inquiries from users about such problems as expiry of the certificate, check the contents of the certificate.

2 On the [General] tab, click [Install Certificate...].

Certificate Import Wizard starts.

3 Install the certificate by following the Certificate Import Wizard instructions.



- ☐ For details about how to install the certificate, see the Web browser Help.
- ☐ If a certificate issued by a certificate authority is installed in the printer, confirm the certificate store location with the certificate authority.

Installing the Certificate Using SmartDeviceMonitor for Client

If the [[Security Alert]] dialog box appears when accessing the printer using IPP to create or configure an IPP port, or when printing, install the certificate.



- ☐ To select the certificate store location when using Certificate Import Wizard, click **[Place all certificates in the following store]**, and then click **[Local Computer]** under **[Trusted Root Certification Authorities]**.
- ☐ Internet Explorer must be installed on your computer. Use the latest version. Internet Explorer 6.0 or later is recommended.

1 When [Security Alert] appears, click [View Certificate].

The [Certificate] dialog box appears.

2 On the [General] tab, click [Install Certificate...].

Certificate Import Wizard starts.

3 Click [Place all certificates in the following store], and then click [Browse...].

The [Select certificate store] dialog box appears.

4 Click [Next].

5 Select the [Show physical stores] check box, and then click [Local Computer] under [Trusted Root Certification Authorities].

6 Click [OK].

The certificate store location appears under [**Certificate store:**].

7 Click [Next].

8 Click [Finish].

9 Click [OK].

The certificate is installed.



- ☐ When you create or change an IPP port using SmartDeviceMonitor for Client, enter "http://(machine's-address)/ printer" in [**Printer URL**] to access the printer.

Installing Font Manager 2000



- ❑ Under Windows 2000/XP, Windows Server 2003, or Windows NT 4.0, installing applications by Auto Run requires administrator permission. To install a printer driver by Auto Run, log on using an account that has administrator permission.

- 1** Quit all applications currently running.
- 2** Insert the CD-ROM into the CD-ROM drive.
The installer starts.
- 3** Click [Font Manager 2000].
- 4** Follow the instructions on the screen.

Using Adobe PageMaker Version 6.0, 6.5, or 7.0

Under Windows 95/98/Me/2000/XP, Windows Server 2003, or Windows NT 4.0 with Adobe PageMaker, you need to copy PPD files to the PageMaker folder.

PPD files have the .ppd extension in the folder “DRIVERS\PS\WIN9X_ME \ (Language)\DISK1\” on the CD-ROM.

The “WIN9X_ME” folder inside the “PS” folder is for Windows 95/98/Me. Use the folder at this level that is appropriate for the operating system you are currently using.

The third folder “(Language)” may be substituted by an appropriate language name.

Copy the .ppd file to the PageMaker folder.

- **For PageMaker 6.0 default installation**

The directory is “C:\PM6\RSRC\PPD4”.

- **For PageMaker 6.5 default installation**

The directory is “C:\PM65\RSRC\USENGLISH\PPD4”.

The “USENGLISH” may vary depending on your language selection.

- **For PageMaker 7.0 default installation**

The directory is “C:\PM7\RSRC\USENGLISH\PPD4”.

The “USENGLISH” may vary depending on your language selection.



- ☐ If the driver is not set correctly after copying the “.ppd” file, printing may not be performed properly.
- ☐ When using PageMaker, the optional features that can be selected by the printer driver will not be active. The following procedure describes how to activate the optional printer features.
 - ① On the **[File]** menu, click **[Print]**.
The **[Print Document]** dialog box appears.
 - ② Make the necessary settings in the **[Features]** box.

When Using Windows Terminal Service/MetaFrame

The following explains how to use Windows Terminal Service and Maintenance.

Operating Environment

The following operating systems and MetaFrame versions are supported.

- ❖ **Windows NT Server 4.0 Terminal Server Edition with SP6 or higher**
 - MetaFrame 1.8 SP3/FR1 SP3/SP4
 - MetaFrame XP 1.0 SP1/SP2/FR1
- ❖ **Windows 2000 Server/Advanced Server**
 - MetaFrame 1.8 SP3/FR1 SP3/SP4
 - MetaFrame XP 1.0 SP1/SP2/SP3/FR1/FR2/FR3
 - MetaFrame Presentation Server 3.0
- ❖ **Windows 2003 Server**
 - MetaFrame XP 1.0 FR3
 - MetaFrame Presentation Server 3.0

Supported Printer Drivers

- ❖ **When Windows Terminal Service is operating**
 - PCL printer drivers
 - PostScript 3



- ☐ The RPCS printer driver is not supported.
- ☐ Some RPCS printer driver functions do not work if Windows Terminal Service is installed.

Limitations

The following limitations apply to the Windows Terminal Service environment. These limitations are built in Windows Terminal Service or MetaFrame.

❖ **Windows Terminal Service**

In an environment where Windows Terminal Service is installed, some printer driver functions are unavailable, even if no Windows Terminal Service functions are used. Use the install mode to install SmartDeviceMonitor for Client in an environment where Terminal Service is running on a Windows NT Server 4.0 Terminal Server Edition or Windows 2000 Server family computer. The following are the two methods of installation using the install mode:

- ① Use **[Add/Remove Programs]** in **[Control Panel]** to install SmartDeviceMonitor for Client.

- ② Enter the following command in the MS-DOS command prompt:

CHANGE USER /INSTALL

To quit the install mode, enter the following command in the MS-DOS command prompt:

CHANGE USER /EXECUTE



For more information, see Windows Help.

❖ **MetaFrame's [Auto-creating client printers]**

Using **[Auto-creating client printers]**, you can select a logical printer created by copying the client's local printer data to the MetaFrame server. We strongly recommend testing this function in your network environment before using it for your work.

- The settings for optional equipment will not be stored in the server after the equipment is disconnected. The settings for optional equipment will be restored to its defaults each time the client computer logs on to the server.
- When printing a large number of bitmap images or using the server in a WAN environment over dial-up lines such as ISDN, printing may not be possible or errors may occur, depending on data transfer rates.
- When using MetaFrame XP 1.0 or higher versions, we recommend making settings in **[Client Printer bandwidth]** under **[Citrix Management Console]** according to the environment.
- If a print error occurs on the server and the print job or a printer created in **[Auto-creating client printers]** cannot be deleted, we recommend the following:
 - MetaFrame 1.8 SP3, MetaFrame XP 1.0 SP1/FR1
Make settings in **[Delete unfinished print jobs]** in the registry. For details, see the Readme file provided with MetaFrame.
 - MetaFrame XP 1.0 FR2
Make settings in **[Delete pending print jobs at logout]** under **[Printer Properties Management]** of Citrix Management Console.

❖ **MetaFrame's [Printer driver replication]**

Using **[Printer driver replication]**, you can distribute printer drivers across all servers in a server farm. We strongly recommend testing this function in your network environment before using it for your work.

- If the printer drivers are not properly copied, install them directly onto each server.

Cautions When Using Bluetooth Interface Unit

The optional Bluetooth interface unit operation mode is set to **[Public]** as default. If the setting is changed to **[Private]**, only registered computers can use this printer via the Bluetooth interface unit.

Check the operation mode settings using Web Image Monitor or telnet.

Reference

For details about using Web Image Monitor, see [p.161 “Using Web Image Monitor”](#). For details about setting items, see Web Image Monitor Help.

For details about making operation mode settings using telnet, see [p.183 “bt-config”](#).

Information about Installed Applications

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Maintenance Guide

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- Microsoft® Windows® 98 operating system
- Microsoft® Windows® Millennium Edition (Windows Me)
- The product names of Windows® 2000 are as follows:
 - Microsoft® Windows® 2000 Advanced Server
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 - Microsoft® Windows® 2000 Professional
- The product names of Windows® XP are as follows:
 - Microsoft® Windows® XP Professional
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- The product names of Windows Server™ 2003 are as follows:
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 - Microsoft® Windows Server™ 2003 Enterprise Edition
 - Microsoft® Windows Server™ 2003 Web Edition
- The product names of Windows NT® 4.0 are as follows:
 - Microsoft® Windows NT® Server 4.0
 - Microsoft® Windows NT® Workstation 4.0

How to Read This Manual

The following set of symbols is used in this manual.

WARNING

This symbol indicates a potentially hazardous situation that might result in death or serious injury when you misuse the machine without following the instructions under this symbol. Be sure to read the instructions, all of which are described in the Safety Information section.

CAUTION

This symbol indicates a potentially hazardous situation that might result in minor or moderate injury or property damage that does not involve personal injury when you misuse the machine without following the instructions under this symbol. Be sure to read the instructions, all of which are described in the Safety Information section.

* The statements above are notes for your safety.

Important

If this instruction is not followed, paper might be misfed, originals might be damaged, or data might be lost. Be sure to read this.

Preparation

This symbol indicates information or preparations required prior to operating.

Note

This symbol indicates precautions for operation, or actions to take after abnormal operation.

Limitation

This symbol indicates numerical limits, functions that cannot be used together, or conditions in which a particular function cannot be used.

Reference

This symbol indicates a reference.

[]

Keys that appear on the machine's display.

Keys and buttons that appear on the computer's display.

[]

Keys built into the machine's control panel.


Keys on the computer's keyboard.

Paper and Other Media Supported by This Printer

This section describes the paper size, feed direction, and the maximum amount of paper that can be loaded into each paper tray in this printer.














↓ Note





- ❑ The following symbols and terminology are used to represent the feed direction.


| In this manual | On the display | Paper feed direction |
|--|------------------------------|---------------------------|
|  ↑ (Feed direction) | A4 (210 x 297) 8 1/2 x 11 | Short-edge feed direction |

- ❑ Be careful of the paper feed direction. The direction is determined for each paper size.







❖ Input Paper Sizes (Metric version)

| | Feed direction | Size (mm) | Bypass Tray | Tray 1 | Paper Feed Unit (Tray 2/3) |
|--|---|---------------|-------------|--------|----------------------------|
| A4 |  | 210 × 297 | ☆ | ⊙ | ⊙ |
| B5 |  | 182 × 257 | ☆ | ⊙ | ⊙ |
| A5 |  | 148 × 210 | ☆ | × | × |
| A6 |  | 105 × 148 | ☆ | × | × |
| Legal (LG, 8 1/2 × 14 inches) |  | 216 × 356 | ☆ | ⊙ | ⊙ |
| Letter (LT, 8 1/2 × 11 inches) |  | 216 × 279 | ☆ | ⊙ | ⊙ |
| 5 1/2 × 8 1/2 inches |  | 140 × 216 | ☆ | × | × |
| Executive (Exec., 7 1/4 × 10 1/2 inches) |  | 184 × 276 | ☆ | × | × |
| Folio (8 1/4 × 13 inches) |  | 210 × 330 | ☆ | × | × |
| Foolscap (F4, 8 1/2 × 13 inches) |  | 216 × 330 | ☆ | × | × |
| F/GL (8 × 13 inches) |  | 203 × 330 | ☆ | × | × |
| Com#10 Env (4 1/8 × 9 1/2 inches) |  | 104.8 × 241.3 | ☆ | × | × |
| C5 Env (6.38 × 9.02 inches) |  | 162 × 229 | ☆ | × | × |

| | Feed direction | Size (mm) | Bypass Tray | Tray 1 | Paper Feed Unit (Tray 2/3) |
|------------------------------------|---|--------------|-------------|--------|----------------------------|
| C6 Env (4.49 × 6.38 inches) |  | 114 × 162 | ☆ | × | × |
| DL Env (4.33 × 8.66 inches) |  | 110 × 220 | ☆ | × | × |
| Monarch Env (3 7/8 × 7 1/2 inches) |  | 98.4 × 190.5 | ☆ | × | × |
| Custom Size | - | - | ★ | × | × |
| 16K (7.68 × 10 1/2 inches) |  | 195 × 267 | ☆ | × | × |

-  The size is supported and the printer selects it automatically.
- ☆ The size is supported, but it should be selected using the control panel.
- ★ The size is supported, but it should be set as a custom size using the control panel.
The supported size may differ depending on the printer language you use.
Set as a custom size setting using the control panel.
The following sizes are supported:
 - Bypass Tray: approximately 90 - 216 mm in width, and 148 - 356 mm in length.
- × The size is not supported.

❖ Input Paper Sizes (Inch version)

| | Feed direction | Size (inch) | Bypass Tray | Tray 1 | Paper Feed Unit (Tray 2/3) |
|----|---|----------------|-------------|---|---|
| A4 |  | 8.26" × 11.69" | ☆ |  |  |
| B5 |  | 7.17" × 10.12" | ☆ |  |  |

| | Feed direction | Size (inch) | Bypass Tray | Tray 1 | Paper Feed Unit (Tray 2/3) |
|-------------------|----------------|---------------|-------------|--------|----------------------------|
| A5 | | 5.83" × 8.26" | ☆ | × | × |
| A6 | | 4.13" × 5.63" | ☆ | × | × |
| Legal (LG) | | 8½" × 14" | ☆ | ⊙ | ⊙ |
| Letter (LT) | | 8½" × 11" | ☆ | ⊙ | ⊙ |
| 5 ½ × 8 ½ inches | | 5½" × 8½" | ☆ | × | × |
| Executive (Exec.) | | 7¼" × 10½" | ☆ | × | × |
| Folio | | 8¼" × 13" | ☆ | × | × |
| Foolscap F4 | | 8½" × 13" | ☆ | × | × |
| F/GL | | 8" × 13" | ☆ | × | × |
| Com#10 Env | | 4 ⅛" × 9 ½" | ☆ | × | × |
| C5 Env | | 6.38" × 9.02" | ☆ | × | × |
| C6 Env | | 4.49" × 6.38" | ☆ | × | × |
| DL Env | | 4.33" × 8.66" | ☆ | × | × |
| Monarch Env | | 3 ⅞" × 7 ½" | ☆ | × | × |
| Custom Size | - | - | ★ | × | × |
| 16K | | 7.68" × 10½" | ☆ | × | × |

- ⊙
The size is supported and the printer selects it automatically.
- ☆
The size is supported, but it should be selected using the control panel.
- ★
The size is supported, but it should be set as a custom size using the control panel.
The supported size may differ depending on the printer language you use.
Set as a custom size setting using the control panel.
The following sizes are supported:
 - Bypass Tray: approximately 3.55 - 8.50 inches in width, and 5.83 - 14.01 inches in length.
- ×

The size is not supported.

❖ **Paper weight and number of sheets to be set**

| | Supported paper weight | Maximum number of sheets (plain paper) |
|--|---|--|
| Tray 1 Paper Feed Unit (Tray 2, Tray 3) | 60.2 - 104.7 g/m ² (16 - 28 lb.) | 530 (80 g/m ² , 20 lb.) |
| Bypass Tray | 60.2 - 199 g/m ² (16 - 53 lb.) | 100 (80 g/m ² , 20 lb.) |

Check that the top of the stack is not higher than the limit mark inside the tray.

Paper Recommendations

Loading Paper

★ Important

- ❑ Do not use ink-jet printer paper because it may stick to the fusing unit and cause a paper misfeed.
- ❑ Set the paper as described below
 - Tray 1, Paper Feed Unit (Tray 2, Tray 3): Print side facing up
 - Bypass Tray: Print side facing down
- ❑ Print quality cannot be guaranteed if paper other than the ones recommended is used. For more information about recommended paper, contact your sales or service representative.
- ❑ Do not use paper that has already been printed onto by other printers.


Storing Paper

- Paper should always be stored properly. Improperly stored paper might result in poor print quality, paper misfeeds, or printer damage. Recommendations are as follows:
 - Avoid storing paper in humid areas.
 - Avoid exposing paper to direct sunlight.
 - Store on a flat surface.
- Keep paper in the package in which the paper came.


Types of Paper and Other Media

Plain Paper


| | |
|----------------------------|--|
| Paper thickness | 60.2 - 104.7 g/m ² (16 - 28 lb.) <ul style="list-style-type: none"> • [Thin]: 60.2 - 90.2 g/m² (16 - 24 lb.) • [Normal]: 90.2 - 104.7 g/m² (24 - 28 lb.) |
| Printer setup | Make the following two settings using the control panel: <ul style="list-style-type: none"> • Press [Paper Input] menu, [Paper Type], and then [Plain Paper]. • Press [Maintenance] menu, and then [Thin] or [Normal]. |
| Printer driver setup | Click [Plain] or [Plain & Recycled] in the [Type:] list. |
| Enabled paper feeding tray | Any input tray can be used. |

| | |
|----------------------------------|---|
| Number of sheets that can be set | <ul style="list-style-type: none"> • Tray 1: 530 • Tray 2, Tray 3 (Paper Feed Unit Type 3000): 530 • Bypass Tray: 100 <div>  Note </div> <ul style="list-style-type: none"> <input type="checkbox"/> Make sure paper is not stacked higher than the upper limit mark (▼) inside the tray. Make sure paper is not stacked higher than the paper guides inside the bypass tray. |
| Both-side printing | Possible |

Thick Paper


| | |
|----------------------------|--|
| Paper thickness | 105 - 199 g/m ² (28 - 53 lb.) <ul style="list-style-type: none"> • [Thick Paper 1]: 105 - 165 g/m² (28 - 44 lb.) • [Thick Paper 2]: 165 - 199 g/m² (44 - 53 lb.) |
| Printer setup | Press [Paper Input] menu, [Paper Type] and then [Thick Paper 1] or [Thick Paper 2] on the control panel. |
| Printer driver setup | Click [Thick1] or [Thick2] in the [Type:] list. |
| Enabled paper feeding tray | Bypass Tray <ul style="list-style-type: none"> • [Thick Paper 1]: 30 • [Thick Paper 2]: 10 <div>  Note </div> <ul style="list-style-type: none"> <input type="checkbox"/> Make sure paper is not stacked higher than the paper guides inside the bypass tray. |
| Both-side printing | Not possible |
| Additional cautions | <ul style="list-style-type: none"> • Print speed is slightly slower than when using plain paper. |

Adhesive labels


| | |
|----------------------------|---|
| Printer setup | Press [Paper Input] menu, [Paper Type] , and then [Labels] on the control panel. |
| Printer driver setup | Click [Labels] in the [Type:] list. |
| Enabled paper feeding tray | Bypass Tray: 50 <div>  Note </div> <ul style="list-style-type: none"> <input type="checkbox"/> Make sure paper is not stacked higher than the paper guides inside the bypass tray. |
| Both-sided printing | Not possible |
| Additional cautions | Print speed is slightly slower compared to plain paper. |

OHP transparencies


| | |
|---------------|---|
| Printer setup | Press [Paper Input] menu, [Paper Type] , and then [Transparency] on the control panel. |
|---------------|---|

| | |
|----------------------------------|---|
| Printer driver setup | Click [Transparency] in the [Type:] list. |
| Enabled paper feeding tray | Bypass Tray |
| Number of sheets that can be set | Bypass Tray: 50  <input type="checkbox"/> Make sure paper is not stacked higher than the paper guides inside the bypass tray. |
| Both-sided printing | Not possible |
| Additional cautions | <ul style="list-style-type: none"> • Print speed for OHP transparencies is slower than for plain paper. • Due to switching modes, the machine will be on standby for thirty or forty seconds after the job was received. • We recommend that you use a 4000 ANSI lumen or brighter overhead projector to project OHP transparencies. |

Glossy Paper

| | |
|----------------------------|--|
| Printer setup | Press [Paper Input] menu, [Paper Type] , and then [Glossy Paper] on the control panel. |
| Printer driver setup | Click [Glossy] in the [Type:] list. |
| Enabled paper feeding tray | Bypass Tray: 50  <input type="checkbox"/> Make sure paper is not stacked higher than the paper guides inside the bypass tray. |
| Both-sided printing | Not possible |
| Additional cautions | Print speed is slightly slower compared to plain paper. |

Envelopes

| | |
|----------------------------|--|
| Printer setup | Press [Paper Input] menu, [Paper Type] , and then [Thick Paper 1] or [Thick Paper 2] on the control panel. |
| Printer driver setup | Click [Thick1] or [Thick2] in the [Type:] list. |
| Enabled paper feeding tray | Bypass Tray: 10  <input type="checkbox"/> Make sure paper is not stacked higher than the paper guides inside the bypass tray. |
| Both-sided printing | Not possible |

| | |
|---------------------|--|
| Additional cautions | <ul style="list-style-type: none"> • Check the print side is facing down. • Check there is no air in the envelopes before loading. • For better print quality, we recommend the right, left, top, and bottom print margins to be at least 15 mm 0.6 inch. • Load only one size and type of envelope at a time. • Before loading envelopes, flatten their leading edges (the edge going into the printer) by running a pencil or ruler across them. • Some kinds of envelope might cause misfeeds, wrinkles or print poorly. • Print quality on envelopes may be uneven if parts of an envelope have differing thicknesses. Print one or two envelopes to check print quality. • Use flat envelopes with no curl. If they have a curl, flatten them. • Use completely flat envelopes that contain no air inside. • Do not print on both sides of envelopes. |
|---------------------|--|

Paper not supported by this printer

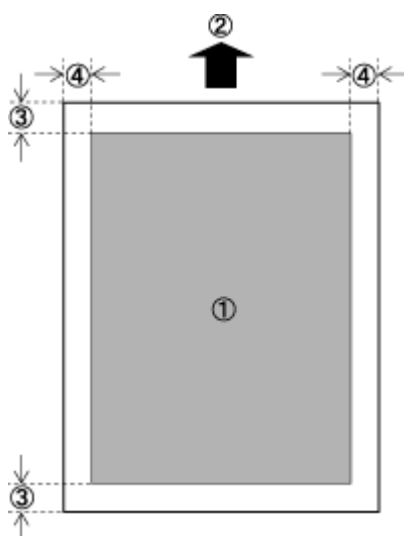
Avoid using the following paper as they are not supported by this printer.

- Paper meant for an ink-jet printer
- Bent, folded, or creased paper
- Curled or twisted paper
- Torn paper
- Wrinkled paper
- Damp paper
- Paper that is dry enough to emit static electricity
- Paper that has already been printed onto, except a preprinted letterhead.
Malfunctions are especially likely when using paper printed on by other than a laser printer (e.g. monochrome and color copiers, ink-jet printers, etc.)
- Special paper, such as thermal paper, aluminum foil, carbon paper and conductive paper
- Paper whose weight is heavier or lighter than the limitation
- Paper with windows, holes, perforations, cutouts, or embossing
- Adhesive label paper on which glue or base paper is exposed
- Paper with clips or staples
- Do not use the following envelopes:
 - Envelopes with multiple flaps
 - Envelopes with a peel-off adhesive strip
 - Envelopes with windows or clasps

Print Area

The following shows the print area for this printer. Be sure to set the print margins correctly by the application.

❖ Paper

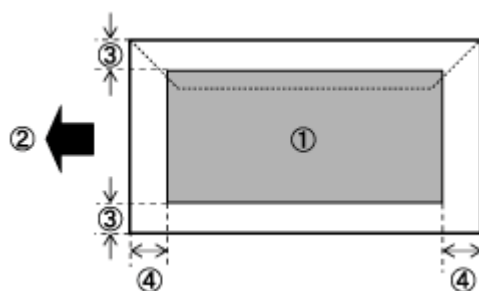


- ① Print area
- ② Feed direction
- ③ Approx. 5 mm (0.2 inches)
- ④ Approx. 5 mm (0.2 inches)

↓ Note

- ☐ The print area may vary depending on the paper size, printer language and printer driver settings.

❖ Envelope



- ① Print area
- ② Feed direction

③ Approx. 5 mm (0.2 inches)

④ Approx. 5 mm (0.2 inches)



- ☐ The print area may vary depending on the paper size, printer language and printer driver settings.

Loading Paper

This describes how to load paper into the paper tray and bypass tray.

CAUTION

- *Do not pull out the paper tray forcefully. If you do, the tray might fall and cause an injury.*

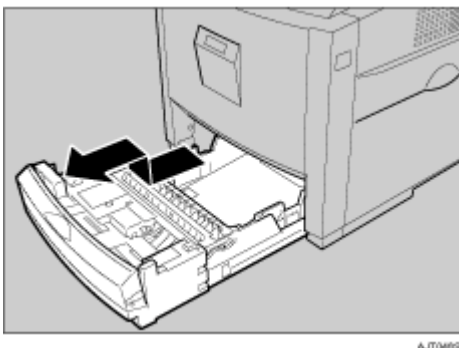
Loading Paper in Tray 1 and the optional paper feed unit

The following example explains loading procedure for the standard paper tray (Tray 1). The same procedure can be used for the optional paper feed unit.

Important

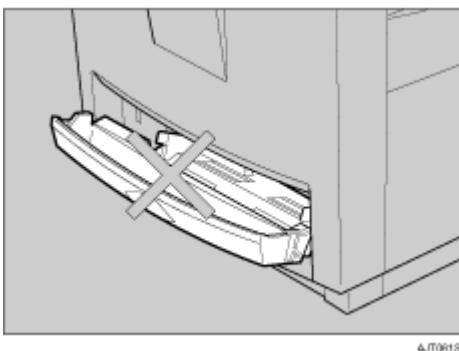
- ☐ Make sure paper is not stacked above the limit mark inside the tray. Misfeeds might occur.
- ☐ Do not put different types of paper in a single paper tray.

- 1** Pull the paper tray out of the printer until it stops. Lift it slightly, and then pull it fully out. Place the paper tray on a flat surface.

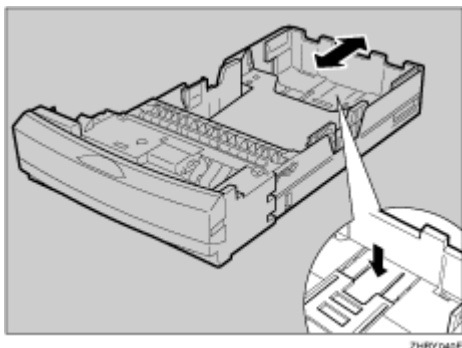


Note

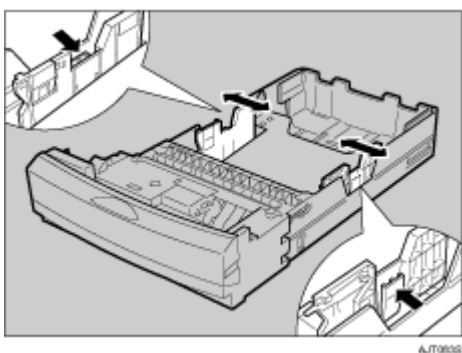
- ☐ You can not pull out Tray 1 if the bypass tray is open.



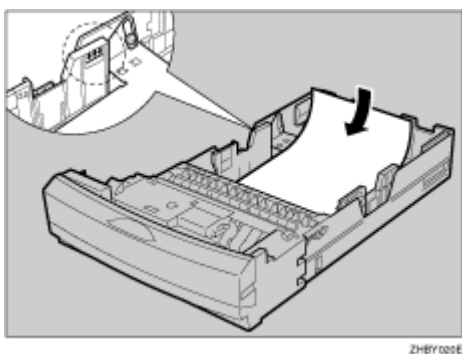
- 2** Press “Push”, and then adjust the rear guide to the paper size you want to load.



- 3** Adjust the side guides to the paper size you want to load.



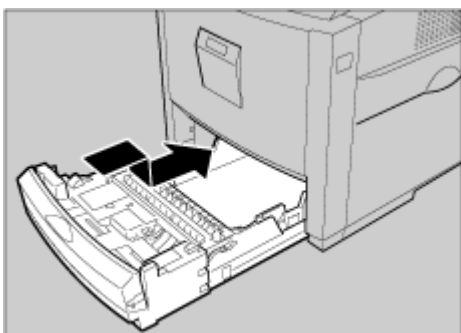
- 4** Load paper print side up in the paper tray.



★ Important

- ☐ Make sure the top of the stack is not higher than the limit mark inside the tray.
- ☐ To avoid misfeeds, set the side guides to the exact paper size.
- ☐ Do not load different kinds of paper in the tray.

5 Slide the paper tray fully into the printer.



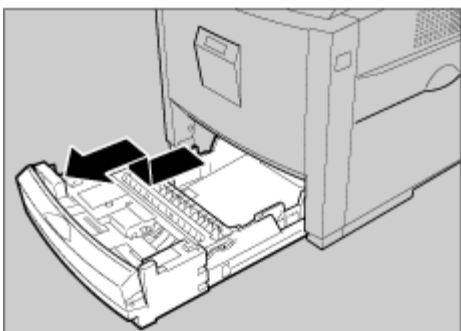
AJT0845

★ Important

- ☐ Misfeeds can occur if the paper tray is not fully inserted. Make sure it is fully inserted.

Changing paper size of the paper tray

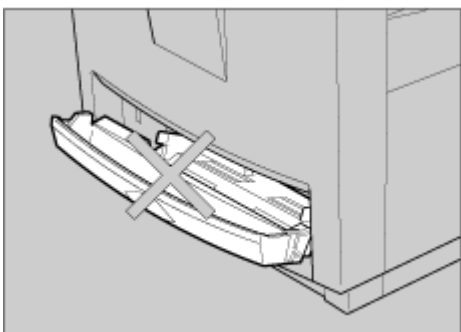
1 Pull the paper tray out of the printer until it stops. Lift it slightly, and then pull it fully out. Place the paper tray on a flat surface.



AJT0855

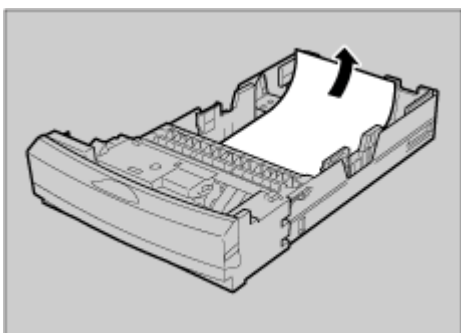
↓ Note

- ☐ You can not pull out Tray 1 if the bypass tray is open.

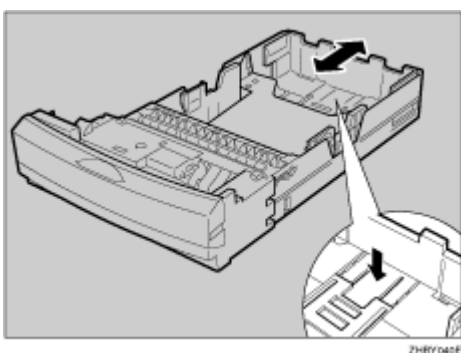


AJT0813

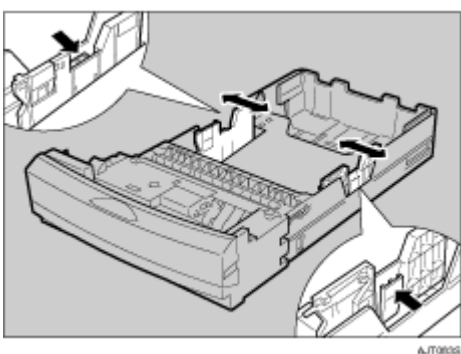
2 Remove the paper.



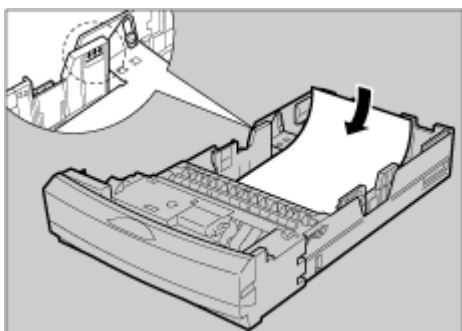
3 Press “Push”, and then adjust the rear guide to the paper size you are using.



4 Adjust the side guides to the paper size you want to load.



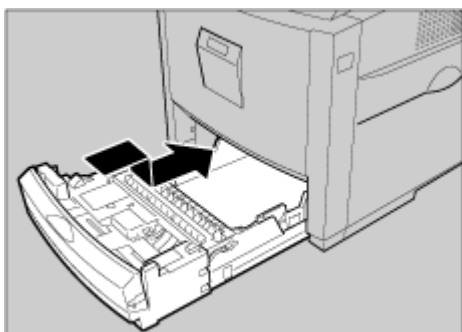
5 Load paper print side up in the paper tray.



★ Important

- ❑ Check the top of the stack is not higher than the limit mark inside the tray.

6 Slide the paper tray fully into the printer.

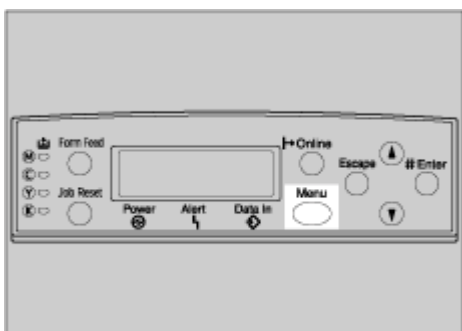


Specifying a paper type for Tray 1 and the optional paper feed unit

Improve printer performance by selecting the optimum paper type for the tray. You can select from the following paper types:

- Plain Paper, Recycled Paper, Special Paper, Color Paper, Letterhead, Pre-printed

1 Press the [Menu] key.



The [Menu] screen appears.

- 2** Press the [▲] or [▼] key to display [Paper Input], and then press the [# Enter] key.

```
Menu:
Paper Input
```

The paper type selection menu appears.

- 3** Press the [▲] or [▼] key to display [Paper Type], and then press the [# Enter] key.

The paper tray selection menu appears.

- 4** Press the [▲] or [▼] key to display the target paper tray, and then press the [# Enter] key.

When the optional paper feed units are installed in the printer, [Tray 2] and [Tray 3] appears (depending on how many units are installed).

```
Paper Type:
Tray 2
```

The paper type selection menu appears.

- 5** Press the [▲] or [▼] key to display the target paper tray, and then press the [# Enter] key.

```
Tray 2:
*Plain Paper
```

After about two seconds, the display returns to the menu.

- 6** Press the [Online] key.

The initial screen appears.

The following message appears on the display:

↓ Note

- ☐ When selecting Plain Paper, select [Thin] or [Normal] for [Plain Paper] in the [Maintenance] menu.

Loading Paper in the Bypass Tray

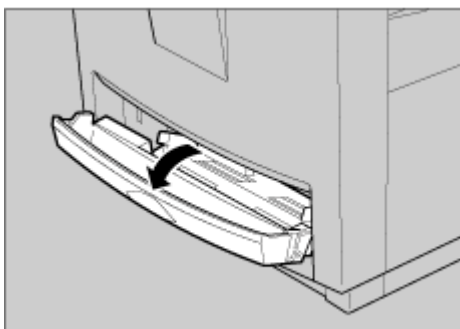
Specifying standard size paper for the Bypass Tray

This section explains how to load standard size paper into the bypass tray.

★ Important

- ❑ To avoid multi-sheet feeds, fan the paper before loading it onto the paper tray.
- ❑ Set the size and direction of the loaded paper using the control panel or the printer driver. Make sure the settings do not conflict. Conflicting settings can cause paper jams or loss of print quality.
- ❑ Load paper print side down and in the short-edge feed direction.

1 Open the bypass tray.



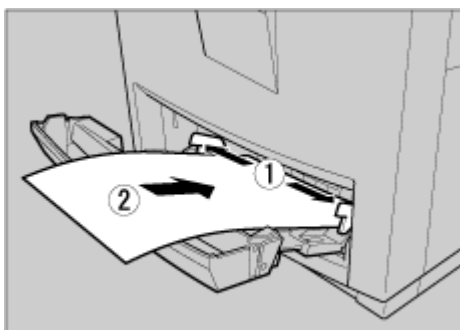
AJT0666

2 Extend the bypass tray.



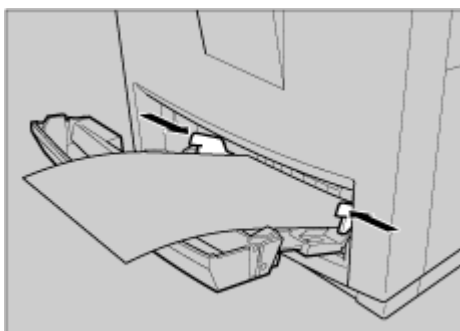
AJT0706

3 Slide the side guides outward (①), and then insert paper print side down until it stops (②).



AJT0715

4 Adjust the side guides to the paper width.

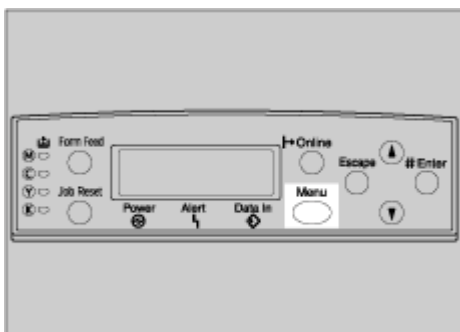


AJT0725

★ Important

- ☐ Check the top of the stack is not higher than the limit mark inside the tray.
- ☐ To avoid multi-sheet feeds, fan the paper before loading it onto the paper tray.

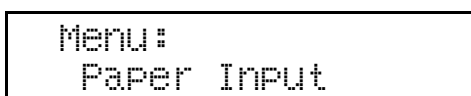
5 Set the paper size using the control panel. Press the [Menu] key.



AGY2005

The [Menu]screen appears.

6 Press the [▲] or [▼] key to display [Paper Input], and then press the [# Enter] key.



The paper selection menu appears.

7 Check that [Bypass Size] appears, and then press the [# Enter] key

The paper size selection menu appears.

- 8** Press the [▲] or [▼] key to display the size and orientation of the paper in the bypass tray.

BYPASS Size:
*8 X 13

After about two seconds, the display returns to the menu.

- 9** Press the [Online] key.

The initial screen appears.



- ☐ To load thick paper, OHP transparencies, or envelopes, make settings for thick paper or OHP transparencies using the control panel and printer driver.
- ☐ The number of pages that can be loaded in the bypass tray differs depending on paper type. Make sure paper is not stacked above the paper guides inside the bypass tray.



For details about control panel settings for custom size paper or special paper, see [p.23 “Specifying custom size paper for the Bypass Tray”](#).

To select custom size paper (148 - 356 mm in length, 90 - 216 mm in width), see [p.23 “Specifying custom size paper for the Bypass Tray”](#).

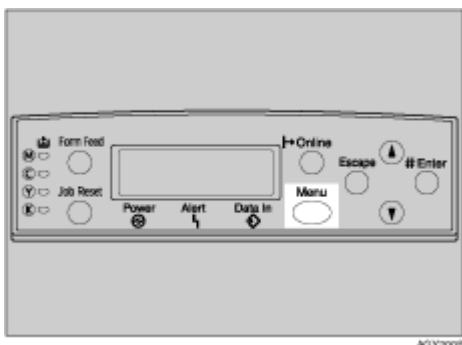
For control panel settings when using thick paper, OHP transparencies, or post cards, see [p.25 “Specifying a paper type for the Bypass Tray”](#).

Specifying custom size paper for the Bypass Tray



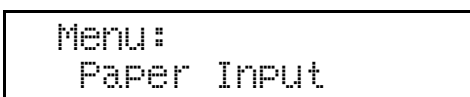
- ☐ When loading custom size or special paper, specify the paper size using the control panel and printer driver.
- ☐ Paper sizes between 148 - 356 in length and 90 - 216 mm in width can be loaded in the bypass tray.
- ☐ The custom paper size selected using the printer driver overrides that selected using the control panel. Do not configure settings using the control panel if you have already made settings using the printer driver. However, when printing with a printer driver other than the RPCS printer driver, you must configure the settings using the control panel.
- ☐ You cannot print on custom size paper with an application that does not support the custom size setting.

1 Press the [Menu] key.



The [Menu] screen appears.

2 Press the [▲] or [▼] key to display [Paper Input], and then press the [# Enter] key.



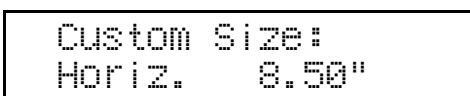
The paper selection menu appears.

3 Check [Bypass Size] appears, and then press the [# Enter] key.

The paper size selection menu appears.

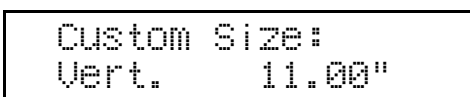
4 Press the [▲] or [▼] key to display [Custom Size], and then press the [# Enter] key.

5 Press the [▲] or [▼] key to set the horizontal value, and then press the [# Enter] key.



By pressing the key, the value increases or decreases by 0.01 inch. By pressing and holding the key, the value varies by 1 inch.

6 Press the [▲] or [▼] key to set the vertical value, and then press the [# Enter] key.



After about two seconds, the display returns to the menu.

7 Press the [Online] key.

The initial screen appears.

Reference

For details about the printer driver, see the printer driver Help.

Specifying a paper type for the Bypass Tray

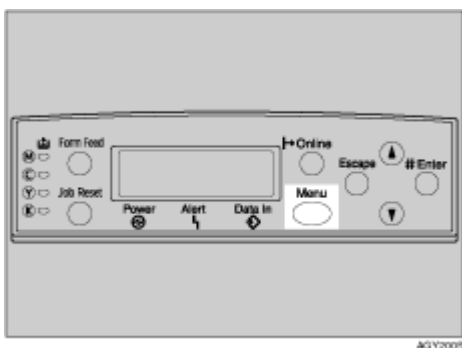
By selecting the paper type you want to load, the printer performs better. You can select from the following paper types:

- Plain Paper, Recycled Paper, Special Paper, Color Paper, Letterhead, Pre-printed, Labels (adhesive label paper), Bond Paper, Cardstock, Transparency (OHP transparency), Thick Paper 1, Thick Paper 2, Glossy Paper

★ Important

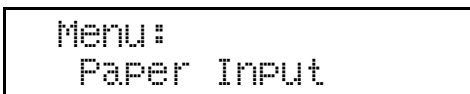
- ❑ Be sure to select the paper type when you load labels, thick paper, or OHP transparencies in the bypass tray.
- ❑ The paper type selected using the printer driver overrides that selected using the control panel.

1 Press the [Menu] key.



The [Menu]screen appears.

2 Press the [▲] or [▼] key to display [Paper Input], and then press the [# Enter] key.



The paper selection menu appears.

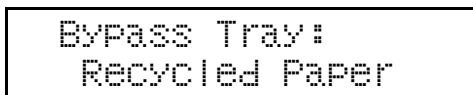
3 Press the [▲] or [▼] key to display [Paper Type], and then press the [# Enter] key.

The paper tray selection menu appears.

4 Press the [▲] or [▼] key to display [Bypass Tray], and then press the [# Enter] key.

The paper type selection menu appears.

- 5** Press the [▲] or [▼] key to display the loaded paper type, and then press the [# Enter] key.



After about two seconds, the display returns to the menu.

- 6** Press the [Online] key.

The initial screen appears.

The following message appears on the display:

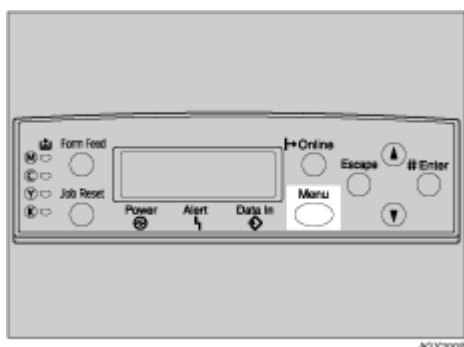


- ☐ When selecting Plain Paper, select [Thin] or [Normal] for [Plain Paper] in the [Maintenance] menu.
- ☐ The following paper types cannot be printed on both sides:
 - Special Paper, Labels (adhesive label paper), Cardstock, Transparency (OHP transparency), Thick Paper 2 (165 - 199 g/m²), Thin Paper, Plain:Dup.Back (reverse side of plain paper), Thick1:Dup.Back (reverse side of thick paper)

Switching between Paper Trays

When paper of the same size is loaded in both the standard tray and the paper feed unit (option), and when [Auto Tray Select] is set with the printer driver, paper will be fed from the standard tray when you start printing. To print on paper loaded in the paper feed unit, switch the tray to be used to the paper feed unit using [Tray Priority] in the [Paper Input] menu.

- 1** Press the [Menu] key.



The [Menu]screen appears.

- 2** Press the [▲] or [▼] key to display [Paper Input], and then press the [# Enter] key.



Menu:
Paper Input

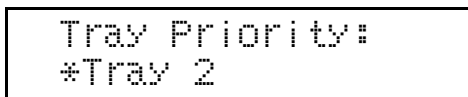
The paper selection menu appears.

- 3** Press the [▲] or [▼] key to display [Tray Priority], and then press the [# Enter] key.

The paper tray selection menu appears.

- 4** Press the [▲] or [▼] key to select the tray type you want to use, and then press the [# Enter] key.

The following message appears on the display:



Tray Priority:
*Tray 2

- 5** Press the [Online] key.

The initial screen appears.

Replacing the Toner Cartridge

WARNING

- ***Do not incinerate spilled toner or used toner. Toner dust is flammable and might ignite when exposed to an open flame.***
- ***Disposal should take place at an authorized dealer or an appropriate collection site.***
- ***If you dispose of the used toner cartridges yourself, dispose of them according to local regulations.***
- ***Do not store toner, used toner, or toner containers in a place with an open flame. The toner might ignite and cause burns or a fire.***

CAUTION

- *Keep toner (used or unused) and the toner cartridge out of reach of children.*
- *If toner or used toner is inhaled, gargle with plenty of water and move into a fresh air environment. Consult a doctor if necessary.*
- *If your skin comes into contact with toner or used toner, wash the affected area thoroughly with soap and water.*
- *If toner or used toner gets into your eyes, flush immediately with large amounts of water. Consult a doctor if necessary.*

CAUTION

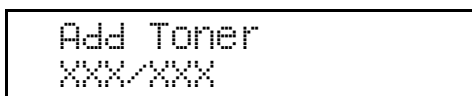
- *If toner or used toner is swallowed, dilute by drinking a large amount of water. Consult a doctor if necessary.*
- *Avoid getting toner on your clothes or skin when removing a paper jam or replacing toner. If your skin comes into contact with toner, wash the affected area thoroughly with soap and water.*
- *If toner gets on your clothing, wash with cold water. Hot water will set the toner into the fabric and may make removing the stain impossible.*

Note

- ☐ When handling toner cartridges, never stand them up on either end or position them upside down.
- ☐ Store toner cartridges in a cool dark place.
- ☐ Actual printable numbers vary depending on image volume and density, number of pages printed at a time, paper type and size, and environmental conditions such as temperature and humidity. Toner quality degrades over time. You may have to replace the toner cartridge prematurely. We recommend you prepare a new toner cartridge beforehand.

The color of the lit LED indicates the toner status for each color. A red light indicates the toner cartridge must be replaced.

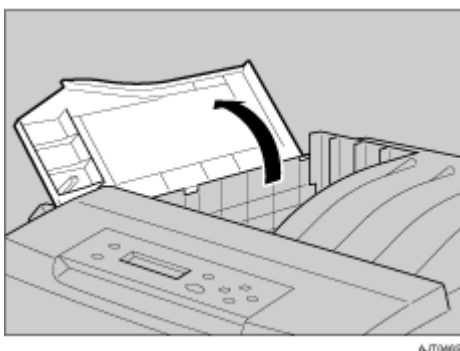
Replace the toner cartridge if the following message appears on the display:



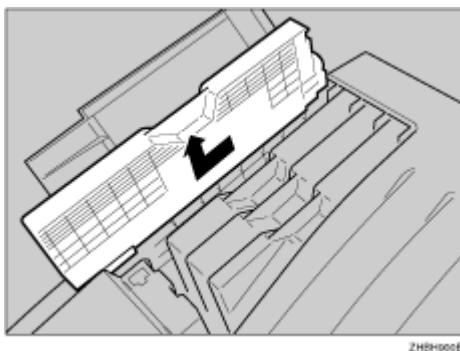
 **Note**

- ☐ A combination of one to four colors, yellow, magenta, cyan, black, appears in “XXX”.
- ☐ If cyan, magenta, or yellow toner runs out, you can print in black and white using black toner. Change the color mode setting to “Black and White” using the printer driver.
- ☐ If black toner runs out, you cannot print in black and white or color until the black toner cartridge is replaced.

1 Open the upper left cover of the printer.



2 Remove the toner cartridge you want to replace.



 **Important**

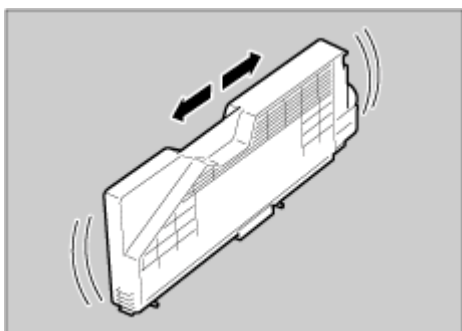
- ☐ Do not shake the removed toner cartridge. Remaining toner may leak.

 **Note**

- ☐ All four cartridges are removed using the same procedure.
- ☐ The illustration uses the yellow cartridge as an example.

3 Take a new toner cartridge out of its package.

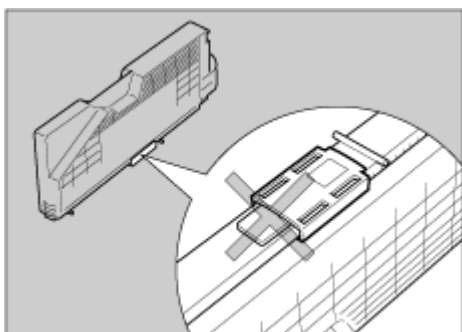
4 Shake the toner cartridge from side to side about 10 times.



ZHSH480E

★ Important

- ☐ Do not open the shutter at the bottom of the toner cartridge. Toner may leak.

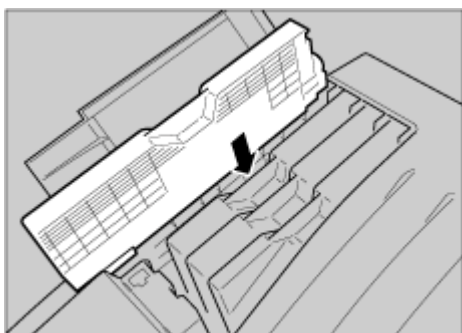


ZHSH470E

↓ Note

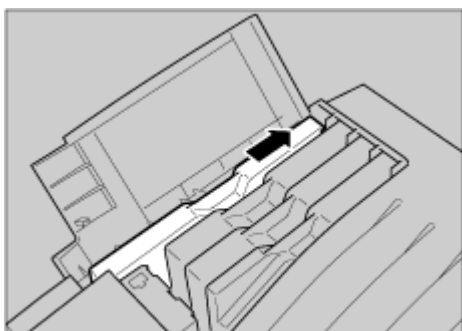
- ☐ The illustration uses the black cartridge as an example.

5 Check the toner color and location correspond, and carefully insert the toner cartridge vertically.



ZHSH480E

6 Insert the toner cartridge in the direction of the arrow.



ZH0H400E

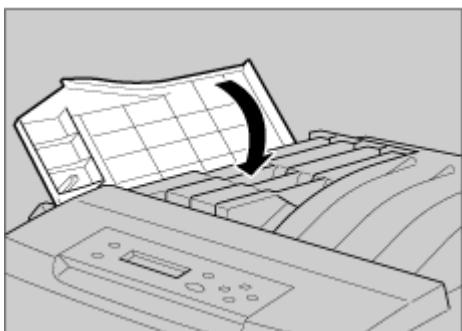
★ Important

- ☐ Do not install and remove toner cartridges unless necessary. Excessive handling results in toner leakage.

↓ Note

- ☐ All four cartridges are installed using the same procedure.

7 Close the printer's upper left cover.



AJT047S

↓ Note

- ☐ If the toner cartridge is not properly installed, you cannot close the printer's upper left cover.

Replacing the Waste Toner Bottle

⚠ WARNING

- *Do not incinerate spilled toner or used toner. Toner dust is flammable and might ignite when exposed to an open flame. Disposal should take place at an authorized dealer or an appropriate collection site. If you dispose of the used toner containers yourself, dispose of them according to local regulations.*

⚠ CAUTION

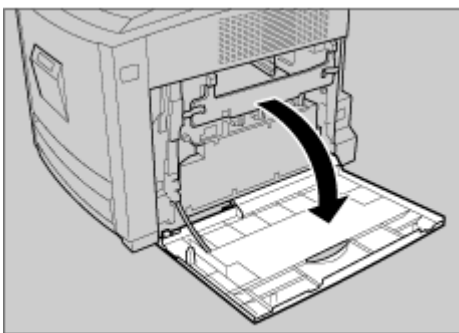
- *Keep toner (used or unused) and the toner cartridge out of reach of children.*
- *Do not put an object on the right cover when it is open.*

Replace the waste toner bottle when the following message appears on the display:

Replace Used
Toner Bottle

1 Turn off the power, and then unplug the power cable.

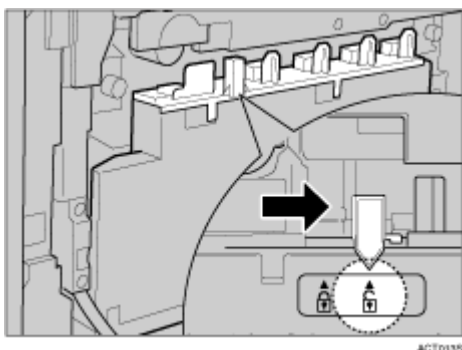
2 Open the right cover.



AUTOMAS

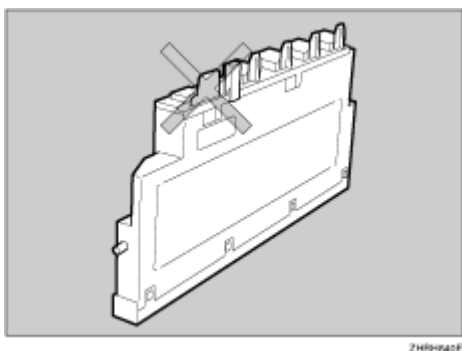
3 Take a new waste toner bottle out of its the bag.

- 4** Unlock the waste toner bottle by sliding the green arrow to the position shown.

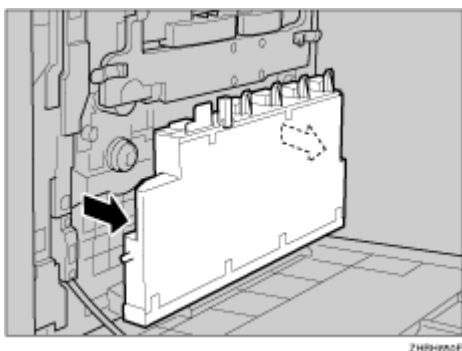


★ Important

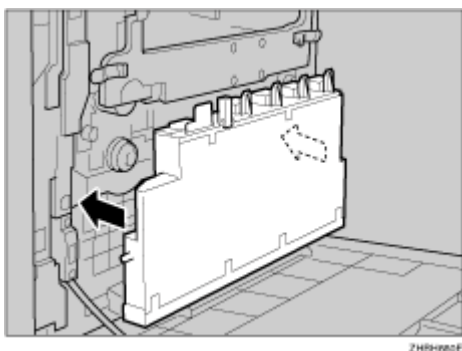
- ☐ Do not lock the removed waste toner bottle. Toner may leak.



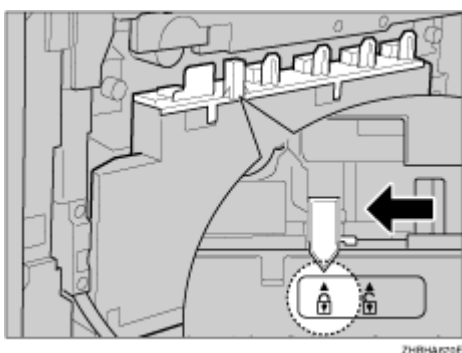
- 5** Remove the used waste toner bottle carefully.



- 6** Place the new waste toner bottle in the position shown in the illustration.



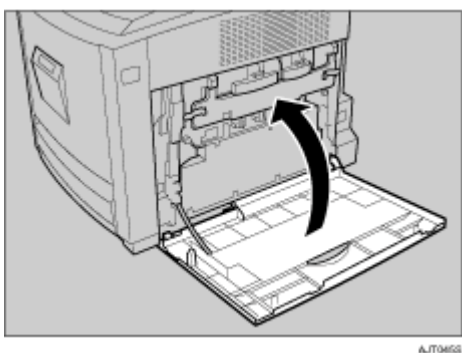
- 7** Lock the waste toner bottle by sliding the green arrow to the position shown.



★ Important

- ☐ Be sure to lock the waste toner bottle to prevent toner from leaking inside the printer.

- 8** Close the right cover carefully.



- 9** Turn on the power.

Replacing the Photo Conductor Unit

Replace the black photo conductor unit when the following message appears on the display:

RePlace Black
PCU

Replace the three color photo conductor units when the following message appears on the display:

RePlace Color
PCU

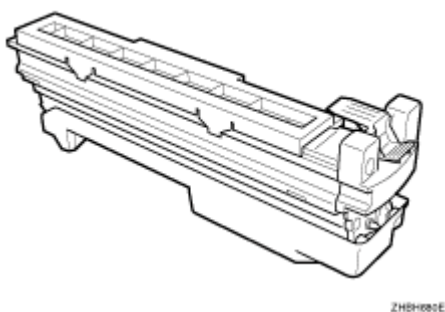
Color photo conductor units (yellow, cyan, and magenta) are supplied as a single item.

★ Important

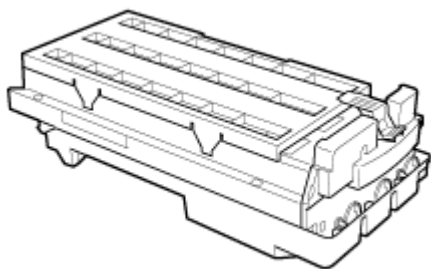
- ☐ Exposure to light reduces photo conductor unit performance. Replace the unit as quickly as possible.
- ☐ Do not pull out the photo conductor unit with force or haste, it may fall and you may damage the machine.
- ☐ Take care that nothing comes into contact with the surface of the photo conductor.

Check the contents of the box for the following items:

❖ Photo Conductor Unit Black



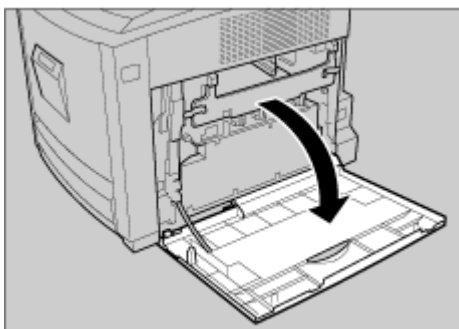
❖ Photo Conductor Unit Color



ZHB060E

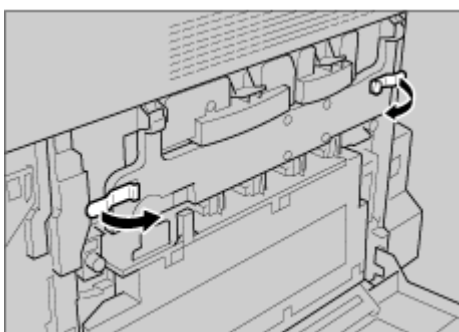
1 Turn off the power, and then unplug the power cable.

2 Open the right cover.



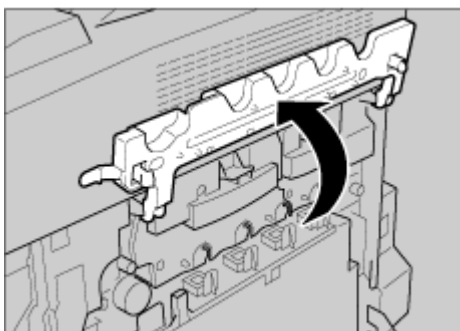
AJT066E

3 Pull out the green levers on the left and right that are securing the inner cover.



ZH0000E

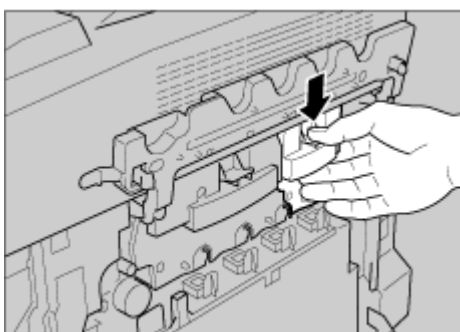
- 4** Lift the inner cover until it stays up.



Z4-BH010E

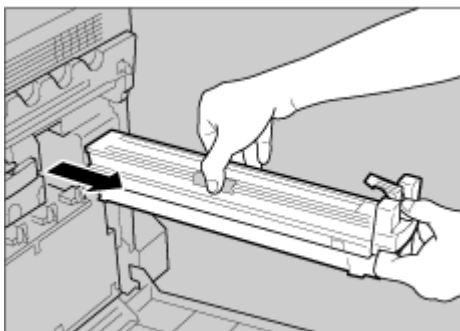
- 5** Remove the photo conductor unit.

- 6** Pinch the green lever to unlock the unit.



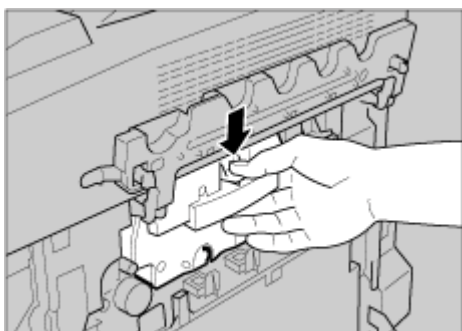
Z4-BH020E

- 7** Pull out the photo conductor unit carefully.



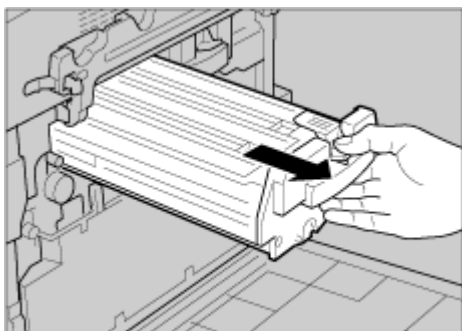
Z4-BH030E

- 8** Pinch the green lever to unlock the unit.



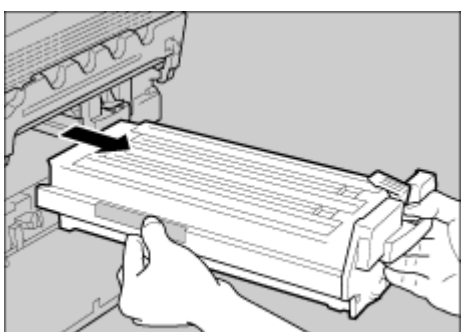
ZHEH040E

- 9** Pull out the photo conductor unit carefully until it stops.



ZHEH050E

- 10** Pinch the green part to release the unit.



ZHEH060E

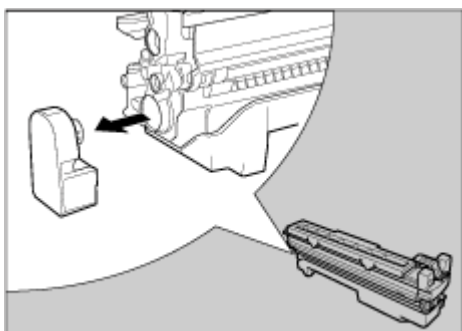
- 11** Pull out the photo conductor unit carefully.



- ☐ Be sure to hold the unit with both hands, and pull it out carefully.

- 12** Take out the new photo conductor unit.

13 Remove the cap attached to the photo conductor unit.

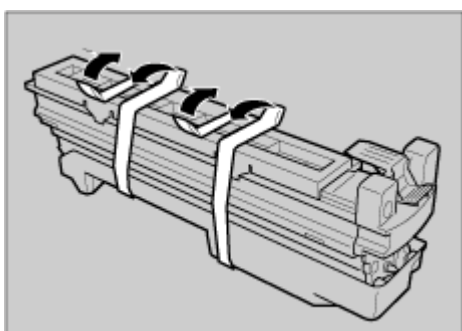


ZHSH4881E

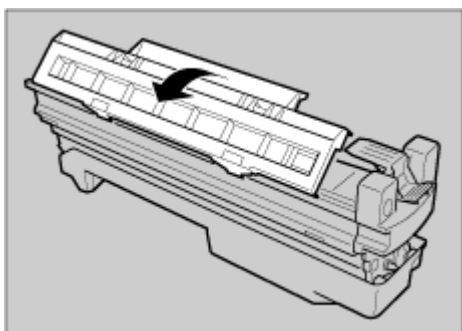
Note

- ☐ The cap is no longer needed and can be disposed of.

14 Remove the tape from around Photo Conductor Unit by peeling it downward, and then remove the unit's top cover.



ZHSH4881E

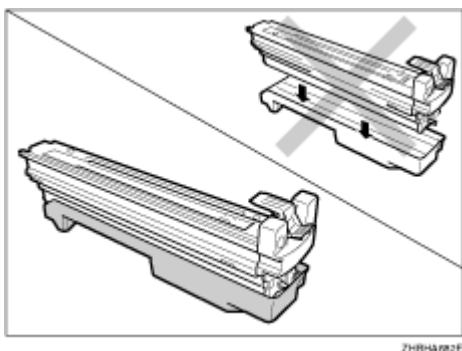


ZHSH4880E

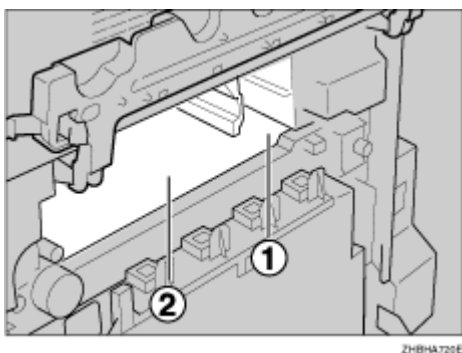
Important

- ☐ Do not remove the cover attached to the bottom of the photo conductor unit yet.

- ❑ After you take the new Photo Conductor Unit out of the bag, quickly install it.



15 Check the locations for each Photo Conductor Unit.



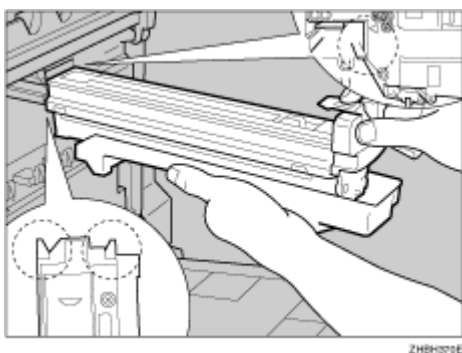
- ① Photo Conductor Unit (Black)
- ② Photo Conductor Unit (Color)

16 Align the green arrow at the tip of the photo conductor unit with the rail inside the printer.

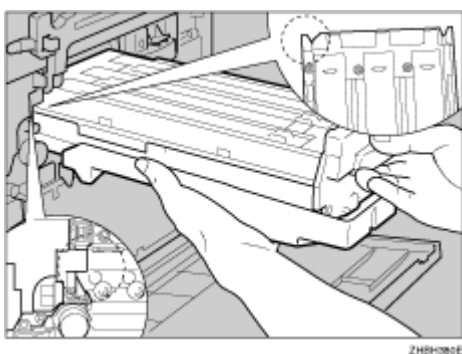
★ Important

- ❑ Make sure the green arrow fits securely to the rail before proceeding to the next step.
- ❑ If you do not securely attach the green arrow of the photo conductor unit to the rail, you may damage the photo conductor unit.

❖ **Photo Conductor Unit Black**

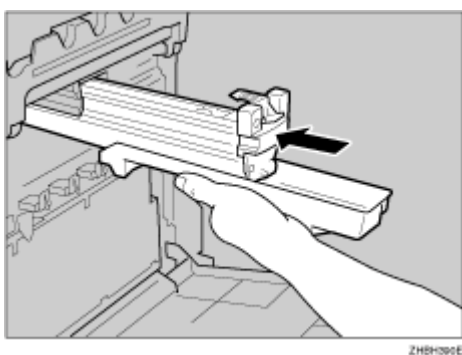


❖ **Photo Conductor Unit Color**

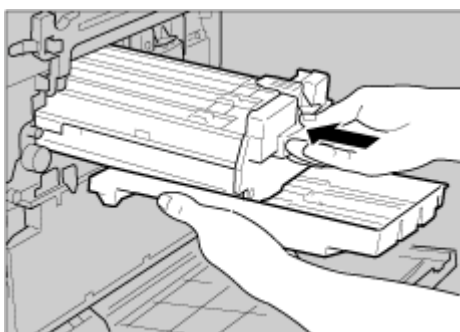


- 17** Push the front of the photo conductor unit carefully in sliding the unit from its cover until it stops.

❖ **Photo Conductor Unit Black**



❖ Photo Conductor Unit Color

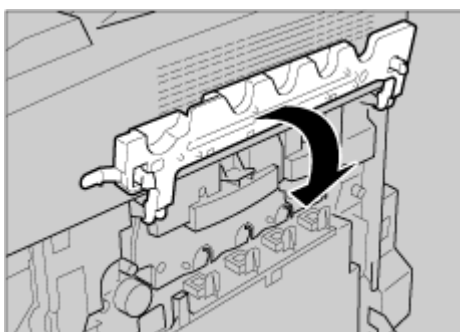


ZHBH400E

★ Important

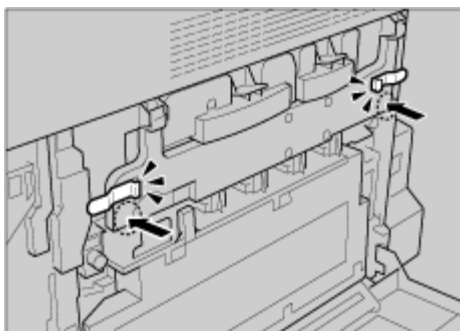
- ❑ If the photo conductor unit is not correctly installed, print quality will be lost. For example, certain colors may not print.

18 Lower the inner cover slowly.



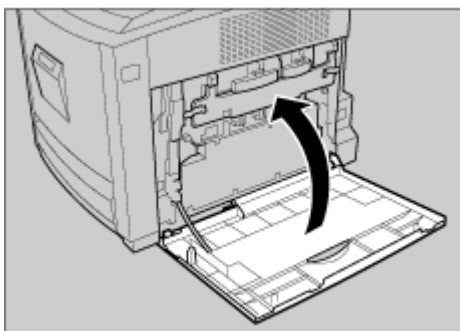
ZHBH410E

19 Push the left and right edge of the inner cover to secure it.



AJT0855

20 Close the right cover carefully.



AUTOMATIC

21 Plug in the power cable, and then turn on the power.

The printer starts calibration. Wait until it stops. The following message appears on the display:

Calibrating...

Wait until **[Ready]** appears on the display panel.



☐ Do not turn off the power during calibration. Doing so results in malfunction.

Replacing the Fusing Unit

⚠ CAUTION

- *The inside of this machine gets very hot. Do not touch parts labelled “⚠”(hot surface). Touching “⚠” labelled parts (hot surface) could result in burns.*
- *The fusing unit gets very hot. When installing a new fusing unit, turn off the printer and wait about 30 minutes. Then you can install the new fusing unit. Handling the unit before it has fully cooled down (30 mins) could result in burns.*
- *Do not pull out the fusing unit forcefully. Doing so may cause the unit to fall and result in injury.*
- *Only the handle of the fusing unit is safe to touch. Touching other areas may result in burns.*

Replace the fusing unit when the following message appears on the display:

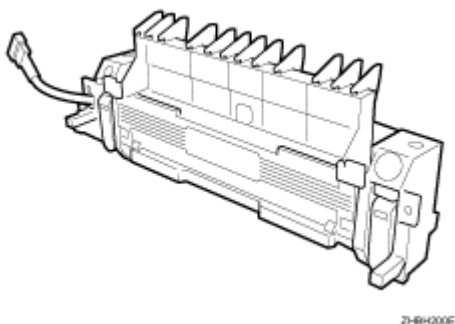
Replace Fusing
Unit soon

or

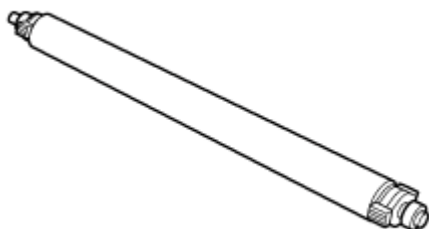
Replace
Fusing Unit

Check the contents of the box for the following items:

❖ Fusing Unit



❖ Transfer Roller



AJT0775

★ Important

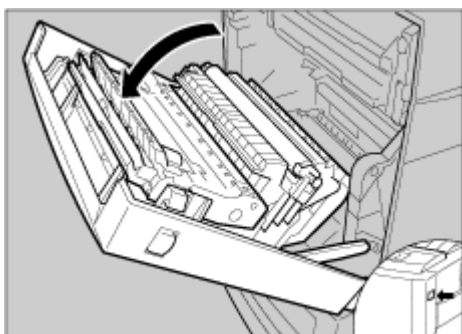
- ❑ Be sure to make the maintenance setting using the control panel after replacing the fusing unit. The procedure is complete only when the maintenance setting is made.

1 Turn off the power, and then unplug the power cable.

★ Important

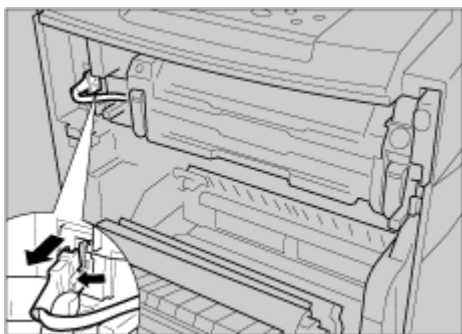
- ❑ After power off, wait 30 minutes for the fusing unit to cool before handling it.

2 Open the front cover by pushing the front cover release button.



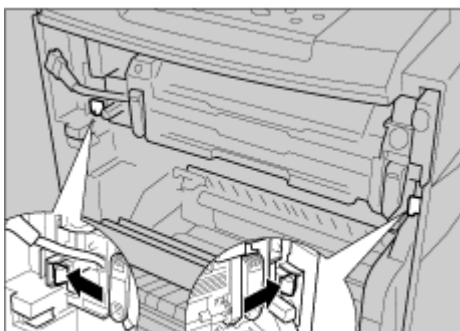
ZHEP281E

3 Pinch the connector lever, and then pull out the connector.



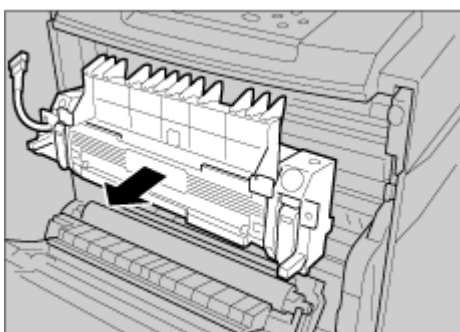
AJT0885

- 4** Push the green release buttons on the left and right outwards to unlock the fusing unit.



AJT0905

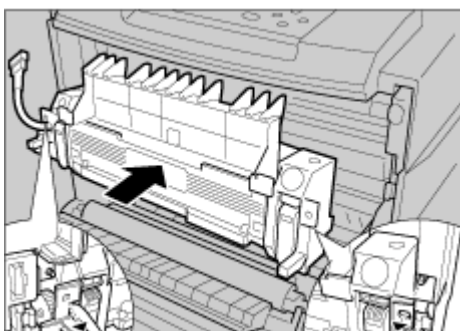
- 5** Remove the fusing unit carefully.



AJT0915

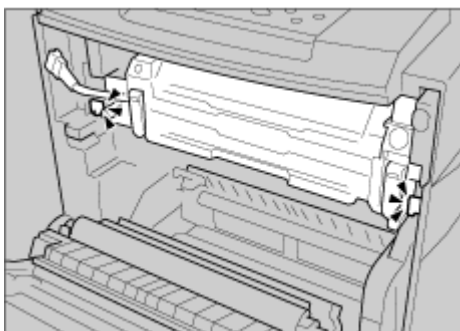
- 6** Take the new fusing unit from out from its box.

- 7** Place the unit as shown, and then carefully insert the new fusing unit.



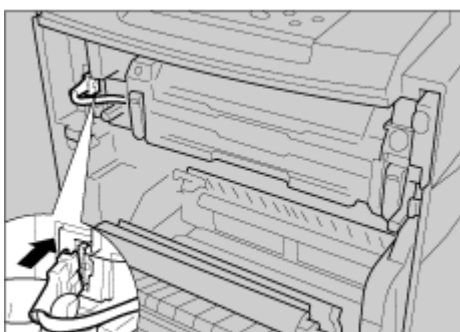
AJT0925

- 8** Carefully push in the fusing unit until it clicks into position, and then check that the unit is locked.



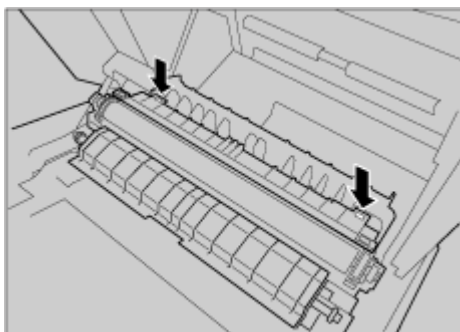
AJT0903

- 9** Push in the connector.



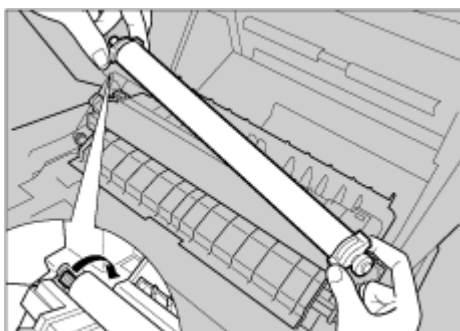
AJT0945

- 10** Open the transfer roller cover.



AJT0796

- 11** Turn the green part in the direction of the arrow, and then remove the transfer roller.



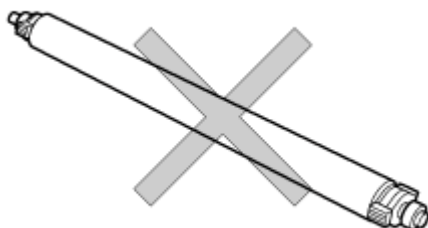
AJT0905

- 12** Take out the new transfer roller.



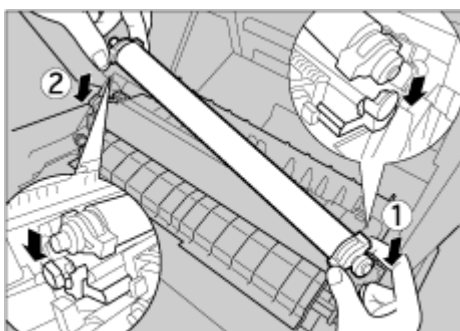
Important

- ☐ Do not touch the roller part.



AJT0905

- 13** Hold the green part as shown, and then insert the transfer roller into the printer.



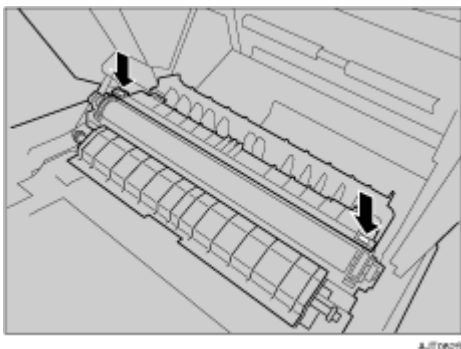
AJT0915



Important

- ☐ The end with the longer shaft must be to the left.

14 Close the transfer roller cover.



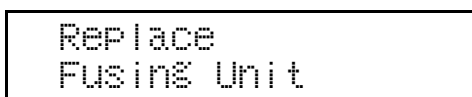
15 Close the front cover carefully.

16 Turn on the power.

17 Make the maintenance setting using the control panel.

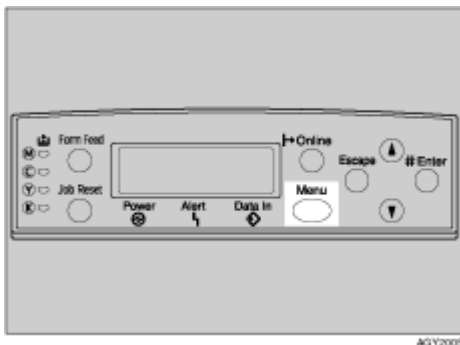
When “Replace Fusing Unit” Appears on the Display

- 1** If the following message appears on the control panel, hold down the [Escape] key for at least five seconds. The message disappears and a maintenance reset is automatically performed.



When “Replace Fusing Unit soon” Appears on the Display

- 1** Press the [Menu] key.



The [Menu] screen appears.

- 2** Press the [▲] or [▼] key to display [Maintenance], and then press the [# Enter] key.

```
Menu:
Maintenance
```

- 3** Press the [▲] or [▼] key to display [Maint. Reset], and then press the [# Enter] key.

```
Maintenance:
Maint. Reset
```

- 4** Press the [▲] or [▼] key to display [Fusing Unit], and then press the [# Enter] key.

```
Maint. Reset:
Fusing Unit
```

The following message appears:

```
Fusing Unit
Press # to reset
```

- 5** Press the [# Enter] key.

Wait a few seconds.

- 6** Press the [Online] key.

The initial screen appears.

Replacing the Intermediate Transfer Unit

⚠ CAUTION

- *The inside of this machine gets very hot. Do not touch parts labelled “⚠” (hot surface). Touching “⚠” labelled parts could result in burns.*

Replace the transfer belt when the following message appears on the display:

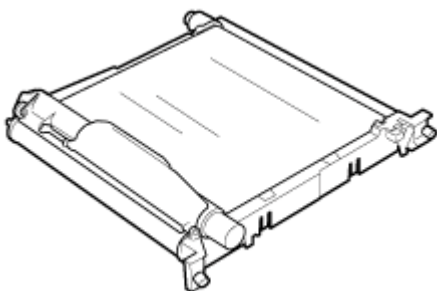
Replace Transfer
Belt soon

or

Replace
Transfer Belt

Check the contents of the box for the following items:

❖ Transfer Belt



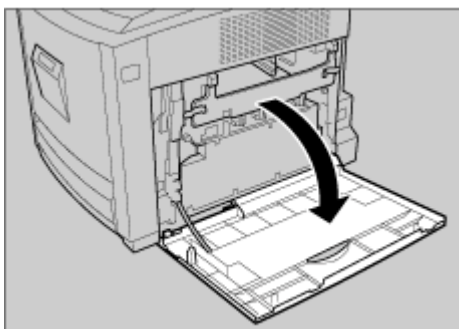
ZHBH510E

★ Important

- ☐ Be sure to make the maintenance setting using the control panel after replacing the transfer belt. The procedure is complete only when the maintenance setting is made.

1 Turn off the power, and then unplug the power cable.

2 Open printer's right cover.



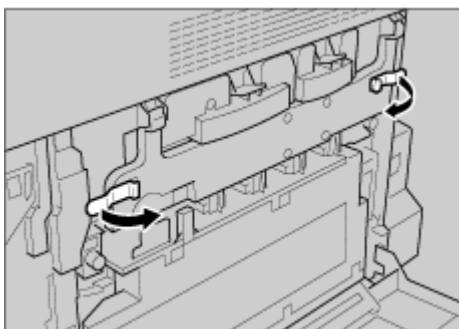
AJT0665

3 Remove the waste toner bottle.



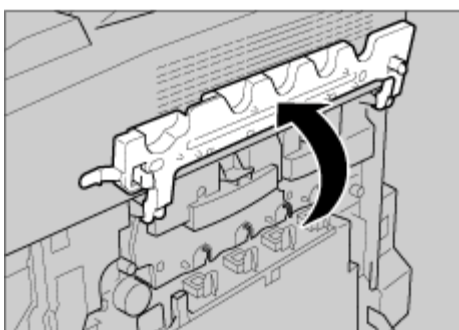
See [p.32 "Replacing the Waste Toner Bottle"](#).

4 Pull out the green levers on the left and right that are securing the inner cover.



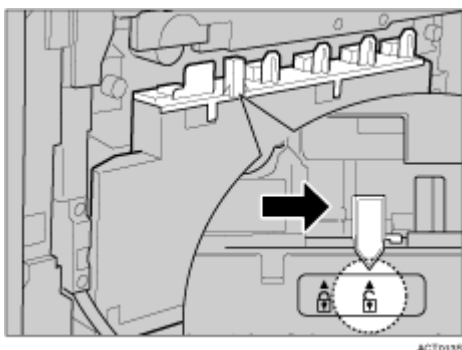
ZH6H000E

5 Lift the inner cover until it stays up.



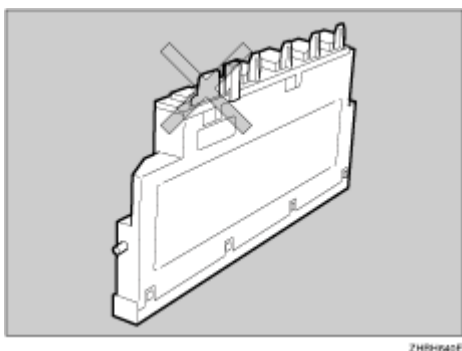
ZH6H010E

- 6** Unlock the waste toner bottle by sliding the green arrow to the position shown.

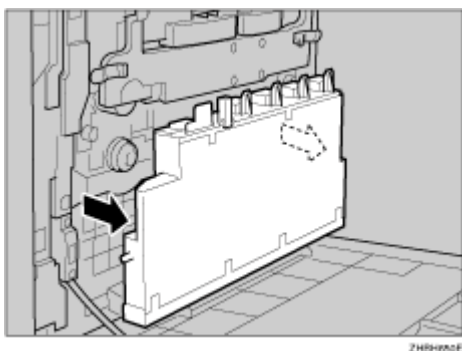


★ Important

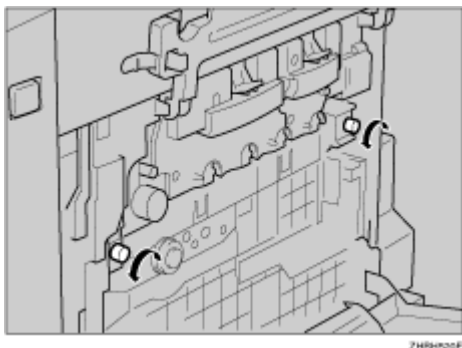
- ☐ Do not lock the removed waste toner bottle. Toner may leak.



- 7** Remove the waste toner bottle carefully.

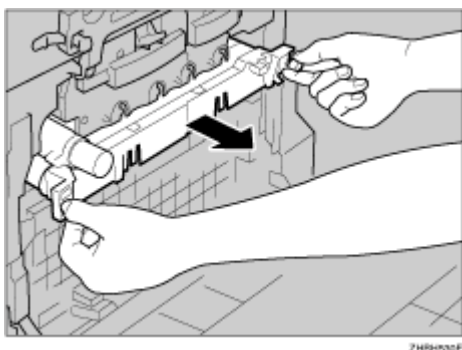


- 8** Loosen the green screws on the left and right by turning them the direction of the arrows.

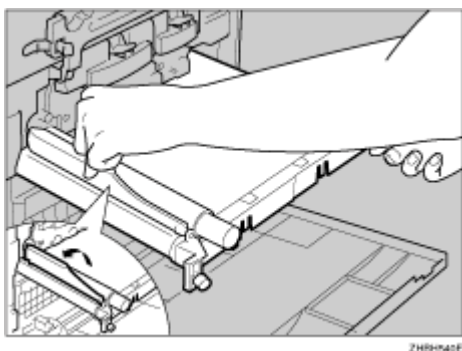


Do not remove the screws.

- 9** Pinch the both screws, and then carefully pull out the transfer belt slowly until it stops.



- 10** Raise the green cover, hold the transfer belt as shown, and then remove the transfer belt.

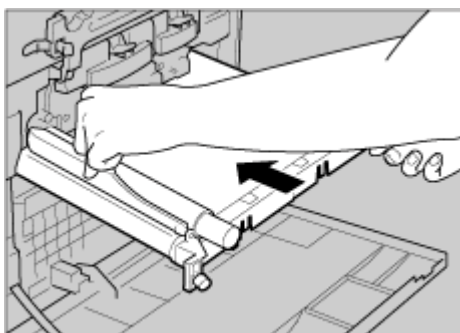


★ Important

- ☐ Be sure to hold the unit with both hands, and pull it out carefully.
- ☐ Do not touch the belt part.

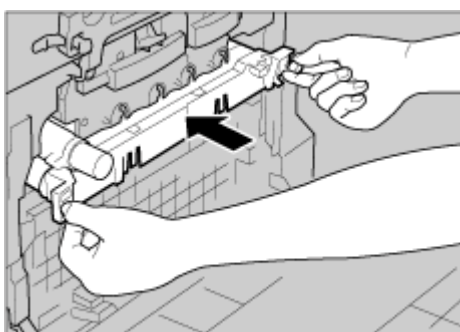
- 11** Take out the new transfer belt.

- 12** Holding the transfer belt as shown, carefully slide the transfer belt into the printer.



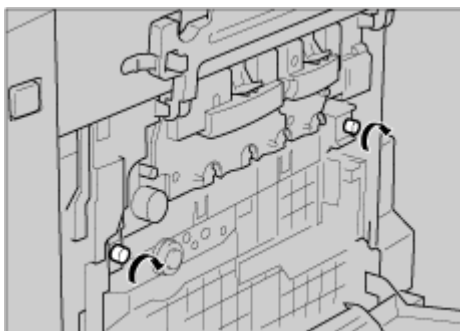
ZHSH000E

- 13** Close the green cover, and then push it in until it stops.



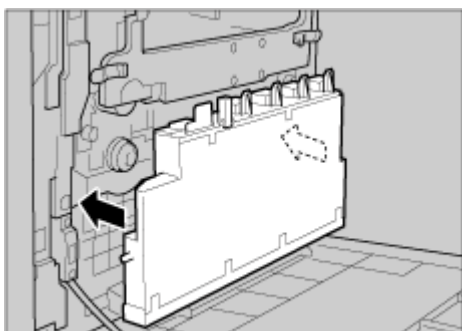
ZHSH000E

- 14** Tighten the green screws on the left and right by turning them the direction of the arrows.

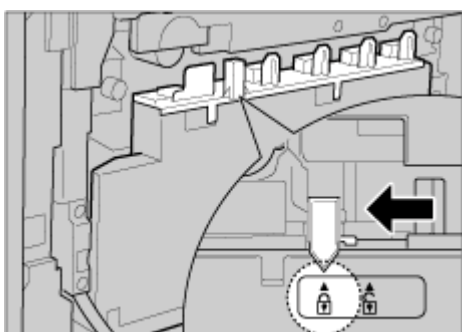


ZHSH000E

- 15** Place the waste toner bottle in the position shown in the illustration.



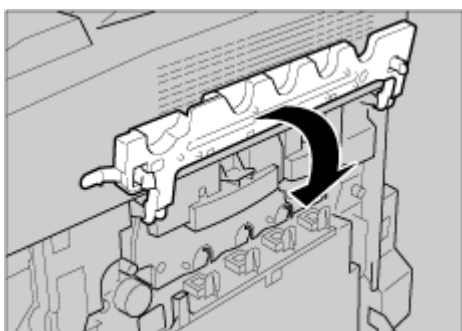
- 16** Lock the waste toner bottle by sliding the green arrow to the position shown.



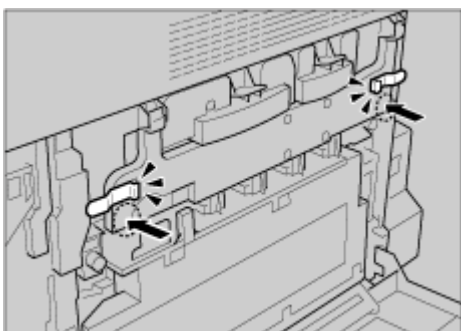
★ Important

- ☐ Be sure to lock the waste toner bottle to prevent toner from leaking inside the printer.

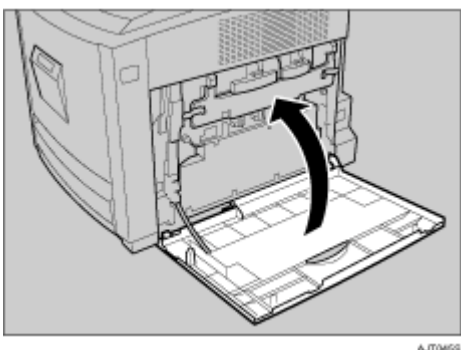
- 17** Lower the inner cover slowly.



- 18** Push the left and right edge of the inner cover to secure it.



- 19** Close the right cover.



- 20** Turn on the power.
- 21** Make the setting using the control panel.

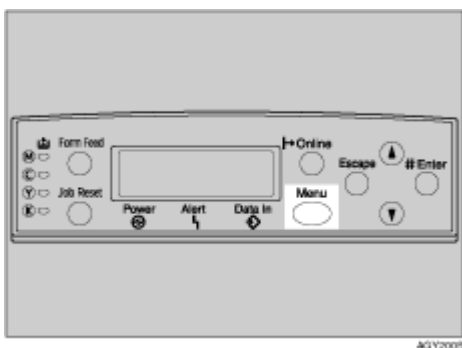
When “Replace Transfer Belt” Appears on the Display

- 1** If the following message appears on the control panel, hold down the [Escape] key for at least five seconds. The message disappears and a maintenance reset is automatically performed.

Replac
Transfer Belt

When “Replace Transfer Belt soon” Appears on the Display

- 1** Press the [Menu] key.



The [Menu] screen appears.

- 2** Press the [▲] or [▼] key to display [Maintenance], and then press the [# Enter] key.

```
Menu:
Maintenance
```

- 3** Press the [▲] or [▼] key to display [Maint. Reset], and then press the [# Enter] key.

```
Maintenance:
Maint. Reset
```

- 4** Press the [▲] or [▼] key to display [Transfer Belt], and then press the [# Enter] key.

```
Maint. Reset:
Transfer Belt
```

The following message appears:

```
Transfer Belt
Press # to reset
```

- 5** Press the [# Enter] key.

Wait a few seconds.

- 6** Press the [Online] key.

The initial screen appears.

Cautions to Take When Cleaning

WARNING

- ***Do not remove any covers or screws other than those specified in this manual. Some parts of the machine are at a high voltage and could give you an electric shock. Also, if the machine has laser systems, direct (or indirect) reflected eye contact with the laser beam may cause serious eye damage. When the machine needs to be checked, adjusted, or repaired, contact your service representative.***
- ***Do not take apart or attempt any modifications to this machine. There is a risk of fire, electric shock, explosion or loss of sight. If the machine has laser systems, there is a risk of serious eye damage.***

CAUTION

- *When removing misfed paper, do not touch the fusing unit because it could be very hot.*

Clean the printer periodically to maintain fine printing.

Dry wipe the exterior with a soft cloth. If dry wiping is not enough, wipe with a soft, wet cloth that is wrung out well. If you still cannot remove the stain or grime, use a neutral detergent, and then wipe over with a well-wrung wet cloth, dry wipe, and let it dry.

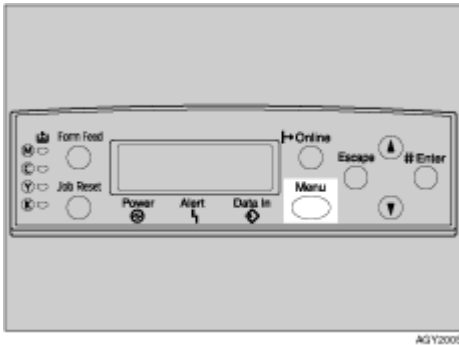
Important

- ☐ To avoid deformation, discoloration, or cracking, do not use volatile chemicals, such as benzine and thinner, or spray insecticide on the printer.
- ☐ If there is dust or grime inside the printer, wipe with a clean, dry cloth.
- ☐ You must disconnect the plug from the wall outlet at least once a year. Clean away any dust and grime from the plug and outlet before reconnecting. Accumulated dust and grime pose a fire hazard.

Adjusting the Color Registration

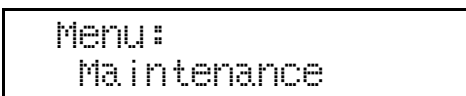
If documents show color degradation after the printer is moved, perform automatic color adjustment.

- 1 Press the [Menu] key.**



The [Menu] screen appears.

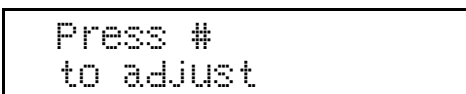
- 2 Press the [▲] or [▼] key to display [Maintenance], and then press the [# Enter] key.**



The maintenance menu appears.

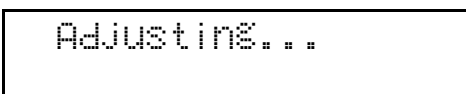
- 3 Press the [▲] or [▼] key to display [Color Regist.], and then press the [# Enter] key.**

The check message appears.



- 4 Press the [# Enter] key.**

Automatic color adjustment begins, and the following message appears.



- ☐ To avoid malfunction, do not turn off the power while [Adjusting...] appears on the display.

Automatic color adjustment takes about 30 seconds. A confirmation message appears when complete.



5 Press the [Escape] key.

Return to the maintenance menu.

6 Press the [Online] key.

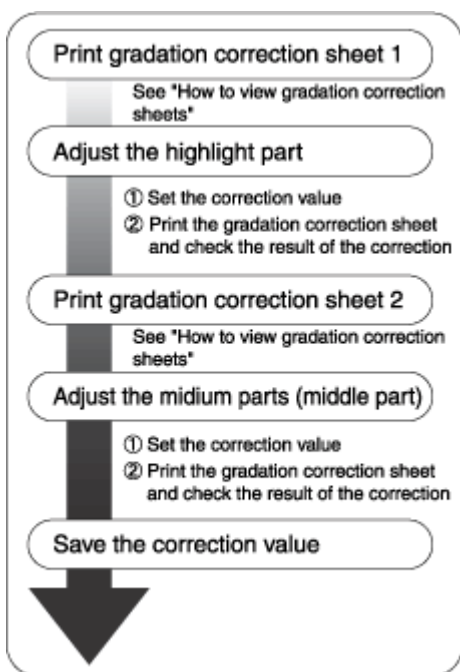
The initial screen appears.

Correcting the Color Gradation

Color gradation during color printing changes slightly, depending on a number of factors. If you print the same file repeatedly or toner was recently replaced, changes may occur in color tones. When this happens, to obtain suitable print results, color gradation can be corrected, although it is not usually necessary to make any particular settings.

↓ Note

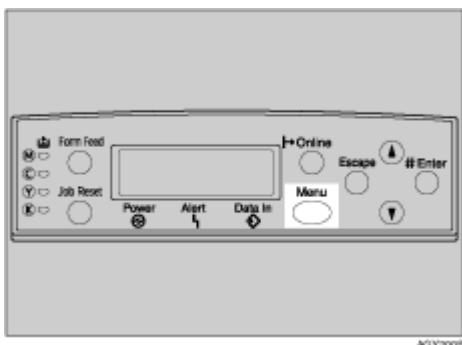
- ☐ If suitable results cannot be obtained after a single operation, repeat the correction several times, as needed.
- ☐ Corrections to color gradation will be applied to all user jobs.
- ☐ Use the same paper when printing a run of gradation corrections. If a different type of paper is used, corrections may not be apparent.
- ☐ This requires the use of the supplied Color Calibration Sample Sheet.
- ☐ Corrections to color gradation are performed in the following order:



Set the Gradation Correction Value

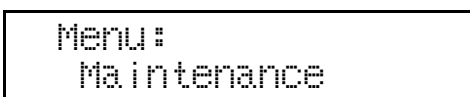
During printing, you can correct the gradation in two areas: bright part (highlight) and the medium (middle). The correction value for the highlight and the medium parts are set using “Calibr.1” and “Calibr.2” respectively.

1 Press the [Menu] key.



The [Menu] screen appears.

2 Press the [▲] or [▼] key to display [Maintenance], and then press the [# Enter] key.



The maintenance menu appears.

3 Press the [▲] or [▼] key to display [Color Calibrate], and then press the [# Enter] key.



☐ If you perform only correction 2, proceed to step [12](#).

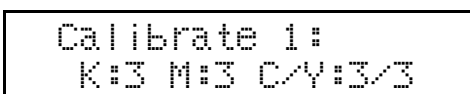
4 Check [Start Calibr. 1] is displayed, and then press the [# Enter] key.

5 Check [Yes] is displayed, and press [# Enter] key to print gradation correction sheet 1.

6 Set the gradation correction value of the highlighted part using correction 1. For setting K (black) gradation, hold the correction value (0-6) for “K” of the correction value setting sheet 1 over the color sample (K) for gradation correction 1 of the Color Calibration Sample Sheet, and set the numerical value of the closest color using either the [▲] or [▼] key.

Set the correction value using the supplied Color Calibration Sample Sheet and the gradation correction sheet 1 printed in the previous step.

Set M (magenta), C (cyan), and Y (yellow) using the same method.



↓ Note

- ☐ Each time the [▲] or [▼] key is pressed, the value increases or decreases respectively, in increments of 1.
- ☐ The correction value can be set between 0 and 6.

7 Press the [# Enter] key after setting the K (black) gradation. The cursor shifts to M (magenta).

```
Calibrate 1:
K:2 M:3 C/Y:3/3
```

8 Set the gradation correction values for M (magenta), C (cyan), and Y (yellow) using the same procedure as for the K (black).

9 If you finished all settings, ensure that the cursor is on the correction value for Y (yellow), and then press the [# Enter] key.

```
Calibrate 1:
K:2 M:2 C/Y:2/2
```

The example shows the display of the control panel when the correction value for each color is changed to 2.

10 Check [Yes] is displayed, and press the [# Enter] key to print the correction result.

11 Check gradation correction sheet 1. To save the correction values, check [Save and exit] is displayed and press the [# Enter] key. If you do not want to save the correction values after this procedure, press the [▲] or [▼] key to display [Exit don't save], and then press the [# Enter] key.

↓ Note

- ☐ If you complete this procedure without saving the correction values, the changes will not be applied to subsequent print jobs.

```
Calibrate 1:
Save and exit
```

```
Calibrate 1:
Exit don't save
```

This concludes the setting for correction 1. Next, proceed to correction 2.

12 Press the [▼] key to display [Start Calibr. 2], and then press the [# Enter] key.

- 13** Check [Yes] is displayed, and then press the [# Enter] key to print gradation correction sheet 2.
- 14** Perform the same operations as used for setting the gradation correction value using correction 1 to set the gradation correction value of the middle part using correction 2.
- 15** After completing all settings, press the [Online] key.

The initial screen appears.



- ☐ Displays on the screen are just examples.

Viewing the Color Calibration Sample Sheet and Gradation Correction Sheet

The color gradation correction value setting sheet contains two color sample columns: the “Sample 1” column for setting the highlight part and the “Sample 2” column for setting the middle part.

Similarly, there are two gradation correction sheets: “Gradation correction sheet 1” for setting the highlight part and “Gradation correction sheet 2” for setting the middle part. Gradation correction sheet 1 is used for calibration 1, while Gradation correction sheet 2 is used for calibration 2.

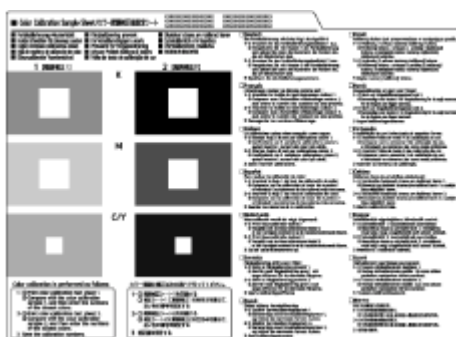
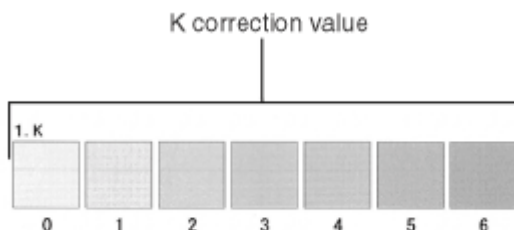
❖ Color sample and correction values

The following explains how to view the color sample of the Color Calibration Sample Sheet and the correction values of the gradation correction sheet.

This explanation uses setting K (black) as an example. The setting method for M (magenta) is similar. For C/Y (cyan/yellow), the correction value is determined based on combinations of these two colors, although panel settings are made for each color.

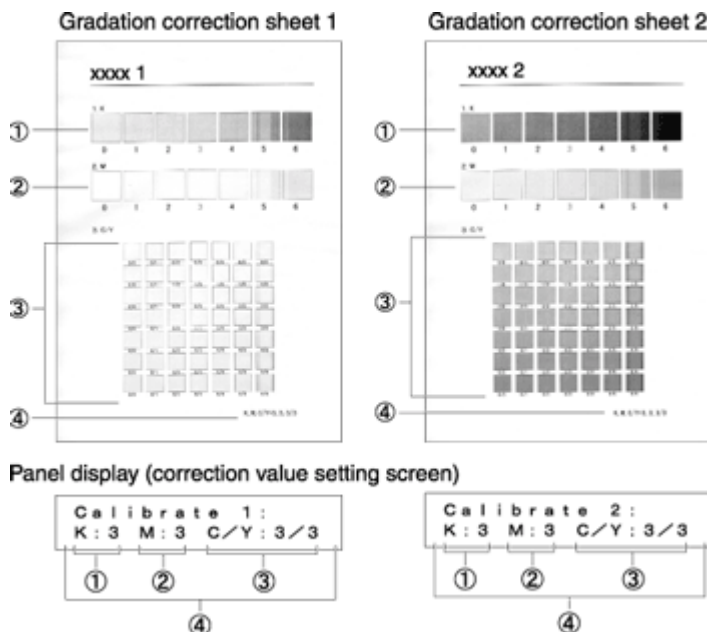
↓ Note

- ☐ Hold the correction value (0-6) for “K” of the correction value setting sheet over the color sample of gradation correction 1 of the Color Calibration Sample Sheet and search for a corrected color closest to that of the color sample, and then set its correction value using the operation panel. The currently set correction value is printed in red.



❖ Relationship between gradation correction sheet and display

The printed gradation correction sheet and display correspond as shown in the following diagram. The gradation correction sheets are used to determine the correction values for the colors K (black), M (magenta), C (cyan), and Y (yellow). These values are set using the control panel.



↓ Note

❑ XXXX represents the printer model name.

① **K (black) correction values**

Adjust the printed color when only black toner is used. The currently set correction value is printed in red.

② **M (magenta) correction values**

Adjust the printed color when only magenta toner is used. The currently set correction value is printed in red.

③ **C (cyan)/Y (yellow) correction values**

Correct the color printed when cyan and yellow are used. For C/Y (cyan/yellow), the correction value is determined based on a combination of these two colors, although settings are made for separately each color.

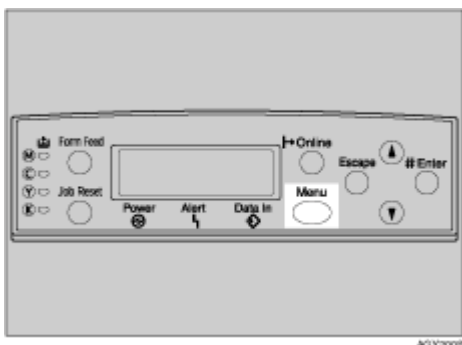
④ **K, M, C/Y**

The numerical value set at time of gradation correction sheet printing is displayed. This corresponds to the numerical value set using the operation panel.

Resetting the gradation correction value to the initial value

Reset the correction value default.

1 Press the [Menu] key.



The [Menu] screen appears.

2 Press the [▲] or [▼] key to display [Maintenance], and then press the [# Enter] key.

```
Menu:
Maintenance
```

The maintenance menu appears.

3 Press the [▲] or [▼] key to display [Color Calibrate], and then press the [# Enter] key.

4 Press the [▲] or [▼] key to display [Reset], and then press the [# Enter] key.

```
Color Calibrate:
Reset
```

A confirmation message is displayed.

```
Press # to reset
Calibration
```

5 Press the [# Enter] key.

A message indicating the gradation correction value has returned to default, is displayed.

```
Calibration was
reset
```

After about 2 seconds, the display returns to the [Color Calibrate: Reset] menu.

6 Press the [Online] key.

The initial screen appears.

Adjusting the Image Density

Adjust the image density when the print side of the page appears shaded or the print image is patchy.

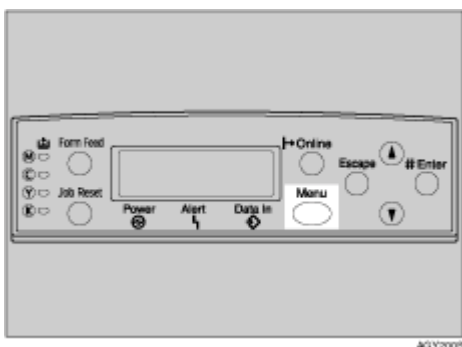
★ Important

- ❑ Extreme settings may create output that appears dirty.
- ❑ Image density settings should be made from the application or the printer driver whenever possible.

↓ Note

- ❑ Changing the image density setting can result in deterioration of color balance. We recommend you leave the image density at its factory default setting.

1 Press the [Menu] key.



The [Menu] screen appears.

2 Press the [▲] or [▼] key to display [Maintenance], and then press the [# Enter] key.

```
Menu:
Maintenance
```

3 Press the [▲] or [▼] key to display [Image Density], and then press the [# Enter] key.

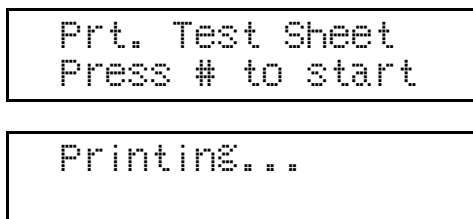
```
Maintenance:
Image Density
```

The following message appears on the display:

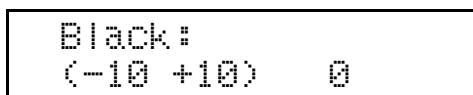
```
Image Density:
Prt. Test Sheet
```

4 Press the [# Enter] key.

When following message appears on the display, press the [# Enter] key.

**5 Compare the colors on the printed image density test sheet with those on the Image Density Adjusting Card.**

- ☐ If the image density of the Image Density Adjusting Card is equal to the framed part of the test sheet, do not adjust the image density value.
- ☐ If the image density of the Image Density Adjusting Card is equal to the density shown above the frame, select “-” as the image density setting. If the image density of the Image Density Adjusting Card is equal to the density shown below the frame, select “+” as the image density setting.

6 Press the [▲] or [▼] key to select the color you want to adjust, and then press the [# Enter] key.**7 Press the [▲] or [▼] key to set the image density value, and then press the [# Enter] key.**

- ☐ You can adjust the image density in 21 increments, from -10 to +10. Increasing the value makes printouts darker and decreasing the value makes printouts lighter.
- ☐ Pressing the [▲] or [▼] key increases or decreases the value in increments of one.

To adjust another color, repeat steps [6](#) and [7](#).

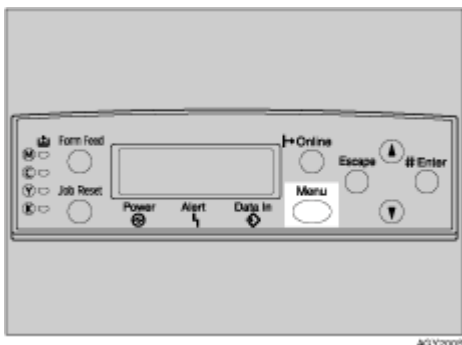
8 Press the [Online] key.

The initial screen appears.

Adjusting Tray Registration

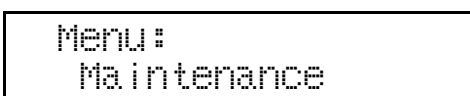
You can adjust the registration of each tray. The vertical adjustment is used for all trays. Normally, you need not update the registration. But when the optional paper feed unit or the duplex unit is installed, updating is useful in some cases. The following procedure describes how to adjust tray 2. The same procedure applies to other trays as well.

- 1** Press the **[Menu]** key.



The **[Menu]** screen appears.

- 2** Press the **[▲]** or **[▼]** key to display **[Maintenance]**, and then press the **[# Enter]** key.



The maintenance menu appears.

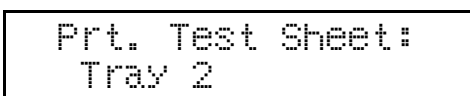
- 3** Press the **[▲]** or **[▼]** key to display **[Registration]**, and then press the **[# Enter]** key.

The registration menu appears.

- 4** Print the test sheet to preview the settings. Confirm that **[Prt. Test Sheet]** is displayed, and then press the **[# Enter]** key.

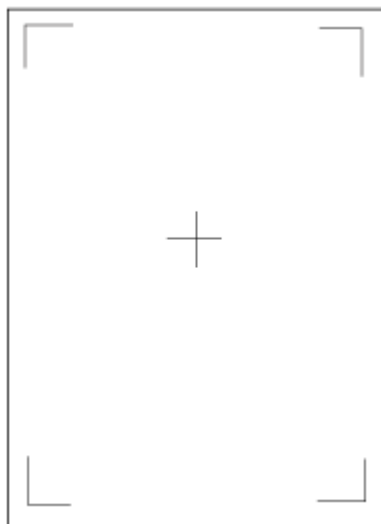
A screen prompting you to select the tray to be adjusted appears.

- 5** Press the **[▲]** or **[▼]** key to select the tray to adjust, and then press the **[# Enter]** key.



The test sheet prints out. The display returns to the registration menu. Press the **[Escape]** key.

- 6** Confirm the position of the image on the test sheet, and then adjust the registration value.



In this setting, adjust the margins of the test sheet so that they are equal in size.

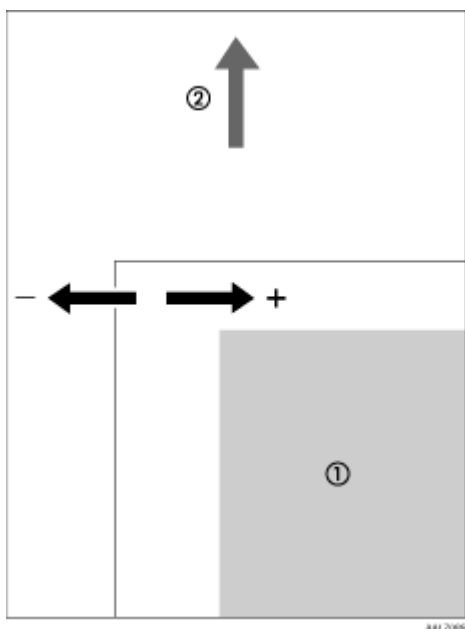
- 7** Press the [▲] or [▼] key to display [Adjustment], and then press the [# Enter] key.
- 8** Press the [▲] or [▼] key to display the parameter to be adjusted, and then press the [# Enter] key.

```
Adjustment:
Horiz: Tray 2
```

- 9** Press the [▲] or [▼] key to set the registration value (mm).

```
Horiz: Tray 2:
(-15 +15)      0
```

Increase the value to shift the print area in the positive direction, and decrease to shift in the negative direction.



① : Print Area

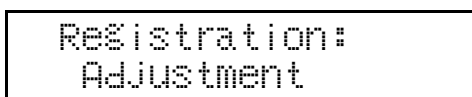
② : Feed Direction



- ☐ Pressing the [▲] or [▼] key makes the value increase or decrease by 1.0 mm steps.

10 Press the [# Enter] key.

The display returns to the print area [Adjustment] menu.



11 Print the test sheet to confirm the adjustment result.

12 Press the [Online] key.

The initial screen appears.


Error & Status Messages on the Control Panel

This section explains what the messages that appear on the control panel mean and what to do when a particular message appears.

❖ Messages (in alphabetical order)

| Messages | Description | Recommended Action |
|---|--|--|
| Add Toner Black | The printer is out of toner (Black). | Replace the toner cartridge (Black). See p.28 "Replacing the Toner Cartridge" . |
| Add Toner Cyan | The printer is out of toner (Cyan). | Replace the toner cartridge (Cyan). See p.28 "Replacing the Toner Cartridge" . |
| Add Toner Magenta | The printer is out of toner (Magenta). | Replace the toner cartridge (Magenta). See p.28 "Replacing the Toner Cartridge" . |
| Add Toner Yellow | The printer is out of toner (Yellow). | Replace the toner cartridge (Yellow). See p.28 "Replacing the Toner Cartridge" . |
| Add Toner XXX/XXX | The printer is out of the indicated toner(s). XXX: Yellow/Magenta/Cyan/Black | Replace the toner cartridge of the indicated color(s). See p.28 "Replacing the Toner Cartridge" . |
| Calibrating... | The printer is calibrating the color. | Wait a while. |
| Call Service: EC Power Off On / Call Service if error reoccurs | A communication error sent from the engine to the controller. | A communication error sent from the engine to the controller. |
| Cannot check Signal in Ad hoc | An attempt to check the radio signal was made while the communication mode was set to [Ad hoc] in the interface settings. | To check the radio signal, select Infrastructure in the communication mode settings. |

| Messages | Description | Recommended Action |
|--|--|--|
| Change Setting Tray # / Paper Size: Paper Type: | The paper size and type setting in the tray differs from that of actual paper size and type in the tray. | Load paper of the selected size in the tray, and then change the paper size setting with the control panel. Or, press [Form Feed] , and then select the tray using the control panel. Or, press [Job Reset] to cancel the print job. |
| Close Front and/ or Right Cover | The front cover or right cover is open. | Close the front cover or right cover. |
| Close Upper Left Cover | The upper left cover open. | Close the upper left cover. |
| DHCP assigned Cannot change | An attempt to change the IP address, subnet mask or gateway address was made while DHCP was set to [On] . | Make the change after setting DHCP to [Off] . |
| Energy Save Mode | In Energy Save Mode level 2. | No action required. |
| Error: Enter 10 or 26 characters | An ID with an invalid number of digits was entered for the WEP key. | Enter the correct number of digits for the WEP key. |
| Error: Enter 5 or 13 characters | An ID with an invalid number of digits was entered for the WEP key. | Enter the correct number of digits for the WEP key. |
| Hardware Problem Ethernet | The printer identified an Ethernet error. | Turn the power off, and then on. If the message appears again, contact your sales or service representative. |
| Hardware Problem HDD | The printer identified a HDD Board error. | Turn the power off, and then on. Remove and re-install the HDD board correctly. If the message appears again, contact your sales or service representative. See "Attaching Printer Hard Disk Type 3000", Setup Guide. |

| Messages | Description | Recommended Action |
|-------------------------------|--|---|
| Hardware Problem IEEE1394 | The printer identified an IEEE 1394 interface board error. | <p>Turn the power off, and then on.</p> <p>Remove and re-install the IEEE 1394 interface board correctly.</p> <ol style="list-style-type: none"> ① Check the IEEE 1394 interface board is correctly attached to the computer. ② Check the IEEE 1394 interface cable is securely connected. ③ Unplug the IEEE 1394 interface cable which is connected to the printer. ④ Restart the computer. If the message appears even after executing above operation, proceed to the following steps. ⑤ Execute the utility tool for IEEE 1394 interface board that is stored in the following path in the CD-ROM labeled "Printer Drivers and Utilities": UTILITY 1394 <p> Important</p> <p><input type="checkbox"/> For details about using the utility tool for IEEE 1394, see the README file in the same directory in the CD-ROM. If the message appears again, contact your sales or service representative.</p> <p>See "Attaching IEEE 1394 Interface Board Type B", Setup Guide.</p> |
| Hardware Problem Black PCU | The printer detected an error in the black photo conductor unit. | <p>Turn the power off, and then on. Remove and re-install the photo conductor unit correctly. If the message appears again, contact your sales or service representative.</p> |

| Messages | Description | Recommended Action |
|------------------------------------|---|--|
| Hardware Problem Color PCU | The printer detected an error in the color photo conductor unit. | Turn the power off, and then on. Remove and re-install the photo conductor unit correctly. If the message appears again, contact your sales or service representative. |
| Hardware Problem Option RAM | The printer identified an optional RAM error. | Turn the power off, and then on. Remove and re-install the optional RAM. If the message appears again, contact your sales or service representative. See "Attaching Memory Unit Type D 128MB, Memory Unit Type E 256MB(SDRAM Module)", Setup Guide. |
| Hardware Problem Parallel I/F | There is a problem with the parallel interface. | If you use the parallel I/F, replace the interface cable that caused the error. Turn the power off, and then on. Remove and re-install the IEEE 1284 interface board correctly. If the message appears again, contact your sales or service representative. |
| Hardware Problem Printer font | Problems with the font file for the Printer module. | It is necessary to replace the print module. |
| Hardware Problem USB | There is a problem related to the Universal Serial Bus Connection and Hardware. | Turn the power off, and then on. If the message appears again, contact your sales or service representative. |
| Hardware Problem Wireless Board | An error was detected in the IEEE 802.11b interface unit or the Bluetooth interface unit. | Turn the power off, and then on. Remove and re-install the IEEE 802.11b interface unit or the Bluetooth interface unit correctly. If the message appears again, contact your sales or service representative. See "Attaching IEEE 802.11b Interface Unit Type H" or "Attaching Bluetooth Interface Unit Type 3245", Setup Guide. |

| Messages | Description | Recommended Action |
|---|--|--|
| Hardware Problem Wireless Card | The IEEE 802.11b interface unit or the Bluetooth interface unit could not be detected when the power was turned on. The IEEE 802.11b interface card or the Bluetooth interface card was removed after the power was turned on. An error was detected in the IEEE 802.11b interface card or the Bluetooth interface card. | Turn the power off, and then on. Remove and re-install the IEEE 802.11b interface unit or the Bluetooth interface unit correctly. If the message appears again, contact your sales or service representative. See “Attaching IEEE 802.11b Interface Unit Type H” or “Attaching Bluetooth Interface Unit Type 3245”, Setup Guide. |
| Hex Dump Mode | In Hex Dump Mode. | No action required. |
| Invalid Data Power Off On | The printer has received irregular data. | Turn the power off, and then on. If the message appears again, contact your sales or service representative. |
| Invalid Password Try again | The password entered using the control panel is not correct. | Enter the correct password using the control panel. |
| Load Correct Size Paper / Press # to continue | The paper size set in the indicated tray differs from the setting made. | Load paper of the selected size in the tray, and then press the [# Enter] key to resume printing. If you want to ignore the message and continue printing, press the [# Enter] key. |
| Load Paper:Tray # or Form Feed / Paper Size: Paper Type: | The indicated tray is out of paper. #: tray number | Load paper into the indicated paper tray. |
| Load Paper or Form Feed / Paper Size: Paper Type: | ① The printer received a request for a paper type, or paper size not supported by printer, and Tray Locking is not applicable. ② The paper type and size loaded in the tray which the printer searched using Tray Locking is invalid for Duplex Print. | Change the setting of the indicated paper input tray, or press [Job Reset] key. Form Feed is not possible here. |
| Loading Toner... | The printer is loading toner. | Wait a while. |
| Menu Protected Cannot change | The menu is protected and the setting cannot be changed. | Wait for two seconds until the previous display appears. |

| Messages | Description | Recommended Action |
|---------------------------------|--|---|
| No Files exist | There are no files available for Sample Print job or Locked Print job. | Wait for two seconds until the previous display appears. |
| Offline | The printer is offline and cannot print data. | Press [Online] key. |
| Please wait... | The printer is cooling down. | Wait a while. |
| Processing... | Print data is being processed. | Wait a while. |
| RC Gate connection error | Cannot communicate with RC Gate. | Check the device or the RC Gate network connection. |
| Ready | The default ready message. The printer is ready to use. | No action required. |
| Remove Misfeed B: Fusing Unit | There is a misfeed in the fusing unit. | Remove the misfed paper. See p.99 "When "Remove Misfeed B: Fusing Unit" Appears" . |
| Remove Misfeed A: Internal Path | There is a misfeed in the printer. | Remove the misfed paper. See p.96 "When "Remove Misfeed A: Internal Path" Appears" . |
| Remove Misfeed Y: Paper Tray | There is a misfeed in the input tray, or the printer is not feeding paper. | Remove the misfed paper. See p.102 "When "Remove Misfeed Y: Paper Tray" Appears" . |
| Remove Misfeed Z: Duplex Unit | There is a misfeed in the duplex unit. | Remove the misfed paper. See p.104 "When "Remove Misfeed Z: Duplex Unit" Appears" . |
| Remove Paper Standard Tray | The standard output tray is full. | Remove paper from the standard output tray. |
| Replace Black PCU | It is time to replace the black PCU. | Replace the black PCU. See p.35 "Replacing the Photo Conductor Unit" . |
| Replace Black PCU soon | The time to replace the black PCU is soon. | Prepare to replace the black PCU when the message [Replace Black PCU] appears on the display. |
| Replace Color PCU | It is time to replace the color PCU. | Replace the color PCU. See p.35 "Replacing the Photo Conductor Unit" . |



| Messages | Description | Recommended Action |
|--------------------------------|--|---|
| Replace Color PCU soon | The time to replace the color PCU is soon. | Prepare to replace the color PCU when the message [Replace Color PCU] appears on the display. |
| Replace Fusing Unit | It is time to replace the fusing unit. | Replace the fusing unit with a new one. See p.44 "Replacing the Fusing Unit" . |
| Replace Fusing Unit soon | The time to replace the fusing unit soon. | Prepare to replace the fusing unit when the message [Replace Fusing Unit] appears on the display. |
| Replace Transfer Belt | It is time to replace the transfer belt. | Replace the transfer belt with a new one. See p.51 "Replacing the Intermediate Transfer Unit" . |
| Replace Transfer Belt soon | The time to replace the transfer belt. | Prepare to replace the transfer belt when the message [Replace Transfer Belt] appears on the display. |
| Replace Used Toner Bottle | It is time to replace the waste toner bottle. | Replace the waste toner bottle. See p.32 "Replacing the Waste Toner Bottle" . |
| Reset Fusing Unit correctly | There is no fusing unit, or the fusing unit is not installed correctly. | Set the fusing unit correctly. |
| Reset Paper Bypass Tray | There is paper left in the bypass tray. | Remove paper from the bypass tray, and then reset the paper. |
| Reset PCU correctly XXX/XXX | The indicated photo conductor unit(s) is/are not set correctly, or not set. XXX: Yellow/ Magenta/Cyan/Black | Set the indicated photo conductor unit(s) correctly. See p.35 "Replacing the Photo Conductor Unit" . |
| Reset Toner XXX/XXX | The indicated toner cartridge is not set correctly. XXX: Yellow/Magenta/Cyan/Black | Set the indicated toner cartridge(s) correctly. See p.28 "Replacing the Toner Cartridge" . |
| Reset Tray # or Form Feed | The indicated paper input tray is not set correctly, or not set. | Set the indicated paper input tray correctly. |
| Resetting Job... | A job is being reset. | Wait a while. |
| ROM Update Waiting for Data | The printer is waiting for updated data. | Don't turn off the printer while it is waiting for data. |

| Messages | Description | Recommended Action |
|---|---|---|
| ROM Update Receiving Data | The printer is receiving updated data. | Don't turn off the printer while it is receiving data. |
| SC XXX-X Power Off On / Call Service if error reoccurs | Turn the power off and then on. If the message appears again, contact your sales or service representative. | Turn the power off, and then on. If the message appears again, contact your sales or service representative. |
| SD authenticatn. failed | Authentication for the SD card has failed. | Turn the power switch off and then back on again. If the message appears again, contact your sales or service representative. |
| Setting change in process | The settings are being changed. | Wait a while. |
| Set Transfr.Belt or UsedTonerBtl. | The transfer belt or waste toner bottle is not set correctly, or not set. | Set transfer belt or waste toner bottle correctly. |
| SSID not entered | This message appears if the SSID has not been entered. | Enter the SSID. |
| Supply order failed | Supply order has failed. | The user is required to reset the job. |
| Toner is almost empty: Black | The printer is almost out of toner (Black). | Prepare to replace the toner cartridge (Black) when the message [Add Toner Black] appears on the display. |
| Toner is almost empty: Cyan | The printer is almost out of toner (Cyan). | Prepare to replace the toner cartridge (Cyan) when the message [Add Toner Cyan] appears on the display. |
| Toner is almost empty: Magenta | The printer is almost out of toner (Magenta). | Prepare to replace the toner cartridge (Magenta) when the message [Add Toner Magenta] appears on the display. |
| Toner is almost empty: Yellow | The printer is almost out of toner (Yellow). | Prepare to replace the toner cartridge (Yellow) when the message [Add Toner Yellow] appears on the display. |
| Update Mode Err. Power Off On | The printer has failed to start updating data. | Turn the printer OFF and then back ON to restart. |
| Used Toner is almost full | The waste toner bottle is almost full. | Prepare to replace the waste toner bottle. See p.32 "Replacing the Waste Toner Bottle". |

| Messages | Description | Recommended Action |
|---------------|--|---------------------------------------|
| Waiting... | The printer is waiting for the next data to print. | Wait a while. |
| Warming up... | The printer is warming up and not ready. | Wait until the printer signals Ready. |

Printer Does Not Print

| Possible Cause | Solutions |
|---|---|
| Is the power on? | Confirm that the cable is securely plugged into the power outlet and the printer. Turn on the power. |
| Does the Online indicator stay on? | If not, press [Online] key to light it. |
| Does the Alert indicator stay red? | If so, check the error message on the display and take the required action. |
| Is paper loaded? | Load paper into the paper tray or onto the bypass tray. See p.15 “Loading Paper” . |
| Can you print a configuration page? | If you cannot print a configuration page, it probably indicates a printer malfunction. Contact your sales or service representative. See “Test Printing”, Setup Guide. |
| Is the interface cable connected securely to the printer and the computer? | Connect the interface cable securely. If it has a fastener, fasten it securely as well. |
| Are you using the correct interface cable? | The type of interface cable you should use depends on the computer you use. Be sure to use the correct one. If the cable is damaged or worn, replace it with a new one. See p.111 “Specifications” . |
| Is the Data In indicator blinking or lit after starting the print job? | If not blinking or lit, the data is not being sent to the printer. ❖ If the printer is connected to the computer using the interface cable Check the port connection setting is correct. For details about checking the port connection, see p.84 “Checking the port connection” . ❖ Network Connection Contact your network administrator. |
| How is the signal strength when using the wireless LAN? | ❖ Ad hoc Mode or 802.11 Ad hoc Mode Either move to a location where the signal is good, or remove obstructions. ❖ Infrastructure Mode Check the signal status from the [Maintenance] menu on the control panel. If the signal is poor, either move to a location where it is good, or remove obstructions. |

| Possible Cause | Solutions |
|---|---|
| How is the signal strength when using Bluetooth ? | <p>Try the following:</p> <ul style="list-style-type: none"> • Check the Bluetooth interface unit is installed properly. • Check there are no obstructions between computer, printer and other devices. • Change the location of the computer. • Change the location of the printer. |
| When you use the optional Bluetooth interface unit. | <p>SPP</p> <ol style="list-style-type: none"> ① Make sure the machine you want to use appears in the 3Com Bluetooth Connection Manager. ② Make sure “Bluetooth Serial Client (COMx)” appears under Client Ports in the 3Com Bluetooth Connection Manager. ③ Restart computer, this printer, and the other devices. ④ Make sure no IEEE 802.11b (wireless LAN) or other Bluetooth devices are in use. <p> Note</p> <ul style="list-style-type: none"> ❑ Interference may occur with the IEEE 802.11b wireless LAN interface board. Such interference may affect the transmission speed and other functions. <ol style="list-style-type: none"> ⑤ Transmissions between computers, other devices, and this printer can be blocked by obstructions. Move this printer, computers, and other devices, if necessary. <p>HCRP, BIP</p> <ol style="list-style-type: none"> ① Restart the computer, this printer, and other devices. ② Make sure no IEEE 802.11b (wireless LAN) or other Bluetooth devices are in use. <p> Note</p> <ul style="list-style-type: none"> ❑ Interference may occur with the IEEE 802.11b wireless LAN interface board. Such interference may affect the transmission speed and other functions. <ol style="list-style-type: none"> ③ Transmissions between computers, other devices, and this printer can be blocked by obstructions. Move this printer, computers, other devices, if necessary. |

If printing still does not start, contact your sales or service representative. Consult with the store where the printer was purchased for information about the location of sales or service representatives.

Checking the port connection

When the printer is directly connected via the PC cable and the data-in indicator does not flash or light up, the method of checking the port connection is as follows.

- For a parallel port connection, port LPT 1 or LPT 2 should be set.
- For a USB port connection, port USB00 (n) ^{*1} should be set.

- For a IEEE 1394 (SCSI print) port connection, port 1394_00 (n) ^{*1} should be set.

*1 (n) is the number of printers connected.

Windows 95/98/Me

- 1** Click [Start], point to [Settings] and then click [Printers].
- 2** Click to select the icon of the printer. Next, on the [File] menu, click [Properties].
- 3** Click the [Details] tab.
- 4** Check the [Print to the following port] box to confirm that the correct port is selected.

Windows 2000

- 1** Click [Start], point to [Settings] and then click [Printers].
- 2** Click to select the icon of the printer. Next, on the [File] menu, click [Properties].
- 3** Click the [Port] tab.
- 4** Check the [Print to the following port] box to confirm that the correct port is selected.

Windows XP Professional, Windows Server 2003

- 1** Access the [Printers and Faxes] window from [Start] on the taskbar.
- 2** Click to select the icon of the printer. Next, on the [File] menu, click [Properties].
- 3** Click the [Port] tab.
- 4** Check the [Print to the following port(s).] box to confirm that the correct port is selected.

Windows XP Home Edition

- 1** Access the [Control Panel] window from [Start] on the taskbar.
- 2** Click [Printers and Other Hardware].
- 3** Click [Printers and Faxes].

- 4** Click to select the icon of the printer. Next, on the [File] menu, click [Properties].
 - 5** Click the [Port] tab.
 - 6** Check the [Print to the following port(s).] box to confirm that the correct port is selected.
-

Windows NT 4.0

- 1** Click [Start], point to [Settings] and then click [Printers].
- 2** Click to select the icon of the printer. After that, on the [File] menu, click [Properties].
- 3** Click the [Port] tab.
- 4** Check the [Print to the following port] box to confirm that the correct port is selected.

Other Printing Problems




| Status | Possible Causes, Descriptions, and Solutions |
|--|--|
| Toner smears appear on the print side of the page. | <p>The paper setting may not be correct. For example, although you are using thick paper, the setting for thick paper may not be set.</p> <ul style="list-style-type: none"> Check the paper settings. See p.9 "Types of Paper and Other Media". Check the printer driver's paper settings. See the printer driver Help. |
| | <p>When [Replace Black PCU] or [Replace Color PCU] appears on the display, replace the photo conductor unit. See p.35 "Replacing the Photo Conductor Unit".</p> |
| | <p>Confirm that the paper is not curled or bent. Envelopes can be curled easily. Flatten paper before loading. See p.5 "Paper and Other Media Supported by This Printer".</p> |
| Paper jams occur frequently. | <p>Number of paper set in the tray exceeds the limit. Confirm that the top of the stack is not higher than the limit mark inside the tray. See p.15 "Loading Paper".</p> |
| | <p>There may be a gap between the rear guide and the paper, or between the side guides and the paper in the paper tray. Make sure there are no gaps. See p.15 "Loading Paper".</p> |
| | <p>Paper is either too thick or too thin. See p.5 "Paper and Other Media Supported by This Printer".</p> |
| | <p>Paper is bent or wrinkled. Use paper that have no bents or wrinkles. See p.5 "Paper and Other Media Supported by This Printer".</p> |
| | <p>Paper has already been printed on. See p.5 "Paper and Other Media Supported by This Printer".</p> |
| | <p>Paper is damp. Use paper that has been stored properly. See p.5 "Paper and Other Media Supported by This Printer".</p> |
| | <p>When loading paper, separate paper from each other.</p> |

| Status | Possible Causes, Descriptions, and Solutions |
|--|---|
| Multiple pages are fed at once. | There may be a gap between the rear guide and the paper, or between the side guides and the paper in the paper tray. Make sure there are no gaps. See p.15 "Loading Paper" . |
| | Paper is either too thick or too thin. See p.5 "Paper and Other Media Supported by This Printer" . |
| | Paper has already been printed on. See p.5 "Paper and Other Media Supported by This Printer" . |
| | Number of paper set in the tray exceeds the limit. Confirm that the top of the stack is not higher than the limit mark inside the tray. See p.5 "Paper and Other Media Supported by This Printer" . |
| | Paper is static. Use paper that has been stored properly. See p.5 "Paper and Other Media Supported by This Printer" . |
| | When loading paper, separate paper from each other |
| Paper gets wrinkles. | Paper is damp. Use paper that has been stored properly. See p.5 "Paper and Other Media Supported by This Printer" . |
| | Paper is too thin. See p.5 "Paper and Other Media Supported by This Printer" . |
| | There may be a gap between the rear guide and the paper, or between the side guides and the paper in the paper tray. Make sure there are no gaps. See p.15 "Loading Paper" . |
| | The fusing unit is deteriorated or damaged. Replace the unit. See p.44 "Replacing the Fusing Unit" . |
| Paper is not fed from the selected tray. | When you are using a Windows operating system, the printer driver settings override those set using the control panel. Set the desired input tray using the printer driver. See the printer driver Help. |
| A printed image is different from the image on the computer's display. | When you use some functions, such as enlargement and reduction, the layout of the image might be different from that displayed in the computer display. |
| | You might have selected to replace True Type fonts with printer fonts in the printing process. To print an image similar to the image on the computer, make the settings to print out True Type fonts as an image. See the printer driver Help. |

| Status | Possible Causes, Descriptions, and Solutions |
|--|--|
| It takes too much time to resume printing. | The data is so large or complex that it takes time to process it. If the Data In indicator is blinking, the data is being processed. Just wait until it resumes. |
| | If OHP transparencies or glossy paper is being used, printing takes more time to start. |
| It takes too much time to complete the print job. | Photographs and other data intensive pages take a long time for the printer to process, so simply wait when printing such data. Changing the settings with printer driver may help to speed up printing. See the printer driver Help. |
| | The data is so large or complex that it takes time to process it. If the Data In indicator is blinking, the data is being processed. Just wait until it resumes. |
| | If [Waiting...] appears on the display, the printer is now warming up. Wait for a while. |
| Images are cut off, or excess pages are printed. | If you are using paper smaller than the paper size selected in the application, use the same size paper as that selected in the application. If you cannot load paper of the correct size, use the reduction function to reduce the image, and then print. See the printer driver Help. |
| The color of the printout is different from the color on the computer's display. | The colors made using color toner are different from colors displayed on the display in its production system. |
| | When [Toner Saving] is checked under the [Print Quality] tab in the printer driver's dialog box, the color gradation may appear differently. See the printer driver Help. |
| The color of the printout is different from the color specified. | If a specific color is missing, turn the power switch off and on. If this does not solve the problem, contact your sales or service representative. |
| Color changes extremely when adjusted with the printer driver. | Do not extreme settings for the color balance under the [Print Quality] tab in the printer driver's dialog box. See the printer driver Help. |
| Photo images are coarse. | Some applications lower the resolution for making prints. |
| Color documents are printed in black and white. | The printer driver is not set up for color printing. See the printer driver Help. |
| | Some applications print color files in black and white. |
| Fine dot pattern does not print. | Change the [Dithering:] setting in the printer driver's dialog box. See the printer driver Help. |




| Status | Possible Causes, Descriptions, and Solutions |
|--|--|
| Solid areas, lines or text are shiny or glossy when created as a mixture of cyan, magenta, yellow. | Select [K (Black)] for [Gray Reproduction (Text/Line Art):] in the printer driver's dialog box. See the printer driver Help. |
| Black gradation is not natural. | Select [CMY + K] for [Gray Reproduction (Text/Line Art):] in the printer driver's dialog box. See the printer driver Help. |
| Solid lines are printed as broken lines. | Change the [Dithering:] setting in the printer driver's dialog box. See the printer driver Help. |
| A color is missing or partially blurred. | Paper is damp. Use paper that has been stored properly. See p.5 "Paper and Other Media Supported by This Printer" . |
| | Toner is almost depleted. When the [Add Toner XXX] or [Toner is almost empty: XXX] message appears on the display panel, or the toner end LED on the control panel is lit, replace the toner cartridge of the displayed color. See p.28 "Replacing the Toner Cartridge" . |
| | When [Replace Black PCU] or [Replace Color PCU] appears on the display, replace the photo conductor unit. See p.35 "Replacing the Photo Conductor Unit" . |
| | Condensation may have collected. If rapid change in temperature or humidity occurs, use this printer only after it has acclimatized. |
| The whole printout is blurred. | Paper is damp. Use paper that has been stored properly. See p.5 "Paper and Other Media Supported by This Printer" . |
| | If you select [Toner Saving] on the [Print Quality] tab in the printer properties dialog box, printing is generally less dense. See the printer driver Help. |
| | Toner is almost depleted. When the [Add Toner XXX] or [Toner is almost empty: XXX] message appears on the display panel, or the toner end LED on the control panel is lit, replace the toner cartridge of the displayed color. See p.28 "Replacing the Toner Cartridge" . |
| | When [Replace Black PCU] or [Replace Color PCU] appears on the display, replace the photo conductor unit. See p.35 "Replacing the Photo Conductor Unit" . |
| | Condensation may have collected. If rapid change in temperature or humidity occurs, use this printer only after it has acclimatized. |



| Status | Possible Causes, Descriptions, and Solutions |
|--|---|
| White streaks or color streaks appear. | Toner is almost depleted. When the [Add Toner XXX] or [Toner is almost empty: XXX] message appears on the display panel, or the toner end LED on the control panel is lit, replace the toner cartridge of the displayed color. See p.28 "Replacing the Toner Cartridge" . |
| | When [Replace Black PCU] or [Replace Color PCU] appears on the display, replace the photo conductor unit. See p.35 "Replacing the Photo Conductor Unit" . |
| White or color rivers appear. | When [Replace Black PCU] or [Replace Color PCU] appears on the display, replace the photo conductor unit. See p.35 "Replacing the Photo Conductor Unit" . |
| The backs of printed sheets are blemished. | When removing a jammed sheet, the inside of the printer may have become dirtied. Print several sheets until they come out clean. |
| | If document size is larger than paper size, e.g. A4 document on B5 paper, the back of the next printed sheet may be dirtied. |
| If rubbed with your finger, it smears out. | The setting of the paper may not be correct. For example, although thick paper is used, the setting for thick paper may not be set. <ul style="list-style-type: none"> • Check the paper settings of this machine. See p.9 "Types of Paper and Other Media". • Check the paper settings of the printer driver. See the printer driver Help. |
| | The fusing unit is deteriorated or damaged. Replace the unit. See p.44 "Replacing the Fusing Unit" . |

| Status | Possible Causes, Descriptions, and Solutions |
|--|---|
| PDF Direct Print is not executed (PDF file is not printed). | <p>You must install an optional hard disk drive or set the value of the [RAM Disk] in the System Menu to 2 MB or higher.</p> <p> Reference</p> <p>See “Attaching Printer Hard Disk Type 3000”, Setup Guide for optional hard disk drive installation.</p> <p>For [RAM Disk], see the “System Menu”, Software Guide.</p> |
| | <p>After adding a memory unit and set the value of the [RAM Disk] in the System Menu to 16 MB, value of the [RAM Disk] returns to 0 MB if the memory unit is removed. If this happens, reset the value of the [RAM Disk] to 2 MB or higher.</p> <p> Reference</p> <p>For [RAM Disk], see the “System Menu”, Software Guide.</p> |
| | <p>When printing a PDF with a password set, set the password of the PDF file using the [PDF: Change PW] menu in [PDF Menu] or Web Image Monitor.</p> <p> Reference</p> <p>For [PDF: Change PW], see the “PDF Menu”, Software Guide.</p> <p>For Web Image Monitor, see Help.</p> |
| | <p>PDF files not allowed to be printed by the PDF file security setting cannot be printed.</p> |
| As a result of printing using PDF Direct Printing, characters are missing or misshapen. | <p>Before printing, embed the font in the PDF file to be printed.</p> |
| The paper size appears on the control panel and printing is not performed with PDF Direct Print. | <p>When using PDF Direct Print, printout requires paper set within the PDF file. When a message indicating a paper size appears, either place the indicated size in the paper tray, or perform Form Feed.</p> <p>Also, if [Sub Paper Size] in the System Menu is set to [Auto], printing is performed assuming letter size and A4 size to be the same size. For example, When a PDF file set to A4 size paper is printed using PDF Direct Print and letter size paper is installed in the paper tray, the file will print out. This applies similarly to the opposite case.</p> |

If the problem cannot be solved, contact your sales or service representative.

Additional Troubleshooting

| Problems | Solutions |
|--|---|
| Strange noise is heard. | If a supply was recently replaced or an option attached in the area the strange noise is coming from, check the supply or option is properly attached. If the strange noise persists, contact your sales or service representative. |
| No e-mail is received when an Alert occurs, and after resolving an Alert. | Confirm [Notify by Email] is [On] using the System Menu on the Control Panel. See "System Menu", Software Guide. |
| | Access the printer through the Web browser, log on as an Administrator on the Web Image Monitor, and then confirm the following settings in [E-mail Notification] : <ul style="list-style-type: none"> • Device E-mail Address • Groups to Notify • Select Groups/Items to Notify <div>  Reference </div> <p>For details about the settings, see Web Image Monitor Help.</p> |
| | Access the printer through the Web browser, log on as an Administrator on the Web Image Monitor, and then confirm the settings of the SMTP server in [E-mail] . <div>  Reference </div> <p>For details about the settings, see Web Image Monitor Help.</p> |
| | When the power is turned off before the e-mail is transmitted, the e-mail will not be received. |
| | Check the e-mail address set for the destination. Confirm the printer's operation history using the Web Image Monitor's System Log menu in [Network] . If the e-mail was sent but not received, it is possible the destination was incorrect. Also check the information concerning error mail from the e-mail server. |
| The setting for [Notify by Email] on the System Menu was changed from [Off] to [On] , but e-mail is not arriving. | After changing the setting, turn the main unit's power off and then back on again. |
| Error notification e-mail was received, but no error-solved e-mail is received. | Check e-mail is set for sending using the Web Image Monitor's [E-mail Notification] at the time the error was fixed. You must click the [Edit] button of [Detailed Settings of Each Item] in [E-mail Notification] , and set [Notify when error:] to [Occurs & Fixed] on the displayed screen. <div>  Reference </div> <p>For details about the settings, see Web Image Monitor Help.</p> |

| Problems | Solutions |
|---|--|
| Alert Resolving is set for sending e-mail, but no Alert-resolved e-mail is sent. | If the power of the main unit is turned off after an Alert occurs, the Alert is resolved during the time the power is off: no Alert-resolved e-mail is sent. |
| Alert Occurrence and Alert Resolving are set for sending e-mail, but while no Alert Occurrence mail is received, Alert-resolved e-mail is received. | Alert-notification e-mail is not sent if the problem is resolved before sending. However, an Alert-resolved e-mail is sent. |
| Alert-notification level was changed, and e-mail stopped arriving. | If an Alert-notification e-mail, set with the earlier notification level, arrives, later e-mail will not be sent, even if the notification level is changed after. |
| When no date information is included in sent e-mail, the mail server has a malfunction. | Make the setting for obtaining time information from the SNTP server. Refer to the Web Image Monitor's Help to the settings. |
| Printing using Bluetooth is slow. | <p>When using the optional Bluetooth interface unit, do the following;</p> <ul style="list-style-type: none"> • Transmit fewer print jobs. • Make sure no IEEE 802.11b (wireless LAN) or other Bluetooth devices are in use. <p> Note</p> <ul style="list-style-type: none"> <input type="checkbox"/> Interference may occur with the IEEE 802.11b wireless LAN interface board. Such interference may affect the transmission speed and other functions. • Transmissions between the client computer and the machine can be blocked by obstructions. Move the machine or client computer if necessary. <p> Note</p> <ul style="list-style-type: none"> <input type="checkbox"/> When you use a Bluetooth connection, print jobs are transmitted relatively slowly. |

If the machine is still not operating satisfactorily, contact your sales or service representative. Consult with the store where the printer was purchased for information about the location of sales or service representatives.

Removing Misfed Paper



An error message appears if a paper misfeed occurs. The error message gives the location of the misfeed.



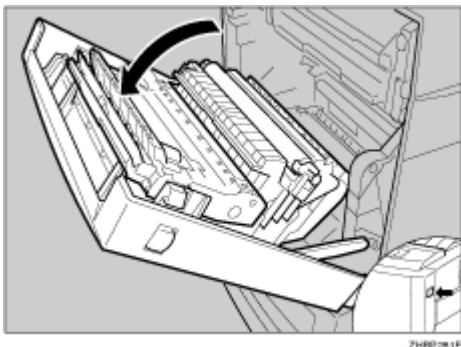
- ☐ Misfed paper may be covered in toner. Be careful not to get toner on your hands or clothes.
- ☐ Toner on prints made after removing misfed paper may be loose (inadequately fused). Make a few test prints until smudges no longer appear.
- ☐ Do not forcefully remove misfed paper, it will tear. Torn pieces remaining inside the printer will cause further misfeeds and possibly damage the printer.

When “Remove Misfeed A: Internal Path” Appears

CAUTION

- The inside of this machine gets very hot. Do not touch parts labelled “” (hot surface). Touching “” labelled parts could result in burns.

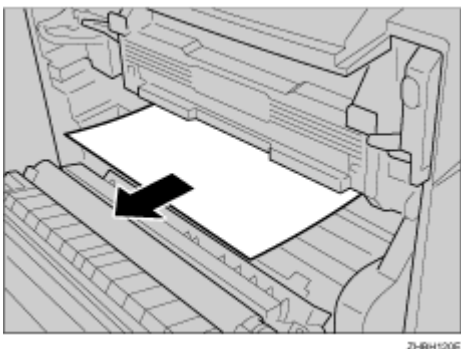
- 1** Open the front cover by pushing the front cover release button.



Note

- ☐ Close the bypass tray if it is extended. If the bypass tray is extended, the front cover does not open.

- 2** Carefully remove any misfed paper.



Important

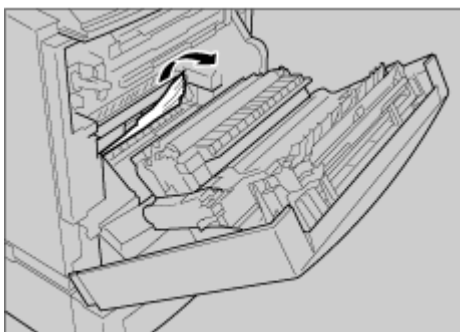
- ☐ If misfed paper is difficult to move or stuck, proceed to the next step. Do not pull forcefully on stuck or jammed paper.

- 3** Pull part “A” in the direction of the arrow, and then open the cover.



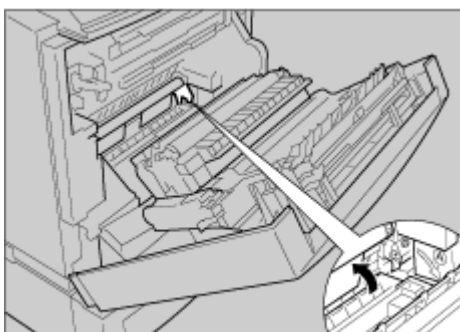
ZI-BH070E

- 4** Remove any misfed paper.



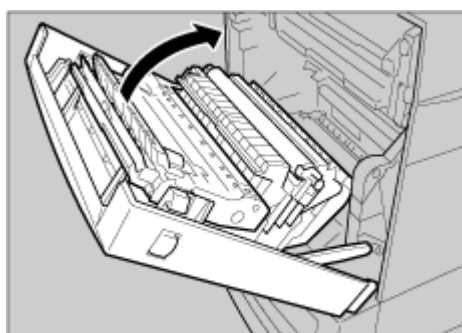
ZI-BH080E

- 5** Close the cover.



ZI-BH080E



- 6** Close the front cover carefully.



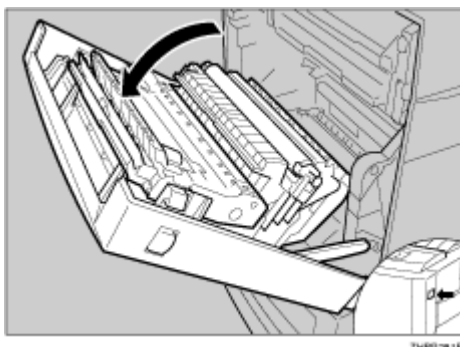
ZHBP082E

When “Remove Misfeed B: Fusing Unit” Appears

CAUTION

- The inside of this machine gets very hot. Do not touch parts labelled “” (hot surface). Touching “” labelled parts could result in burns.

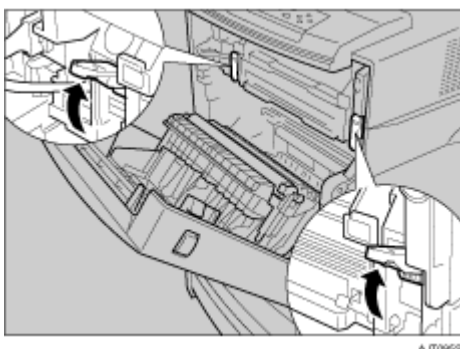
- 1** Open the front cover by pushing the front cover release button.



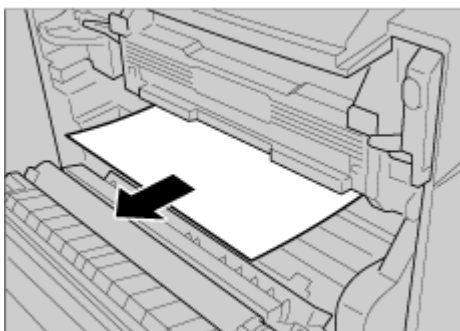
Note

- ☐ Close the bypass tray if it is extended. If the bypass tray is extended, the front cover does not open.

- 2** Pull out levers “B1” on the left and right.



3 Remove any misfed paper.

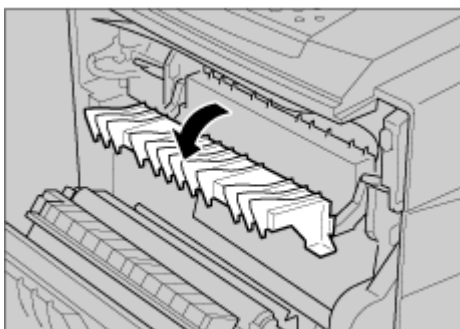


2-6H120E

★ Important

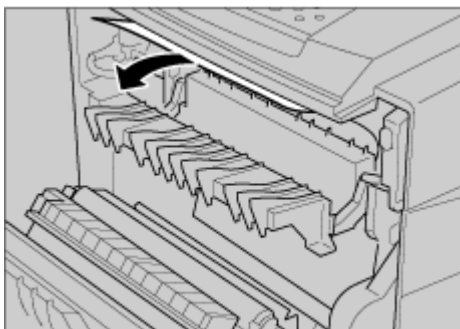
- ☐ If misfed paper is difficult to move or stuck, proceed to the next step. Do not pull forcefully on stuck or jammed paper.

4 Pull part “B2” toward the front, and then open the guide board.



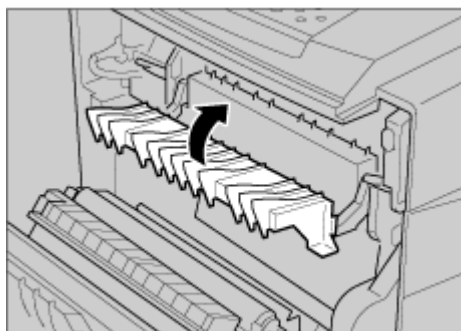
AJT0965

5 Remove any misfed paper.

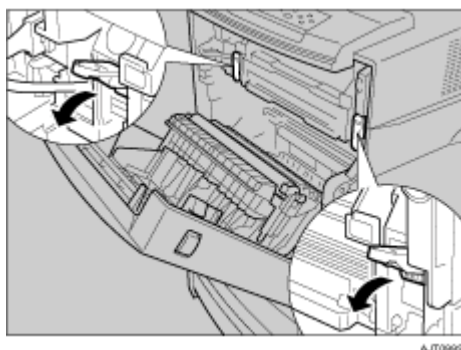


AJT0975

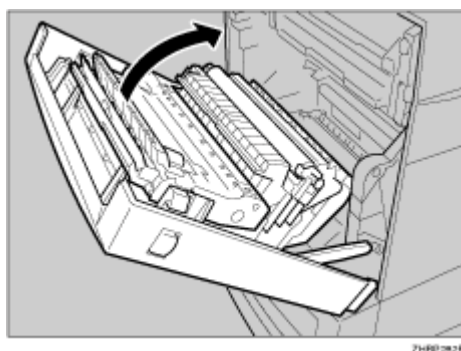
6 Return the guide board.



7 Return levers “B1” on the left and right.

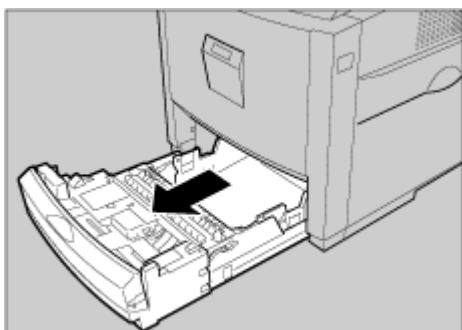


8 Close the front cover carefully.



When “Remove Misfeed Y: Paper Tray” Appears

1 Pull out the tray.



AJT0735

★ Important

- ☐ Do not pull the tray out forcefully. If you do, the tray might fall and cause an injury.

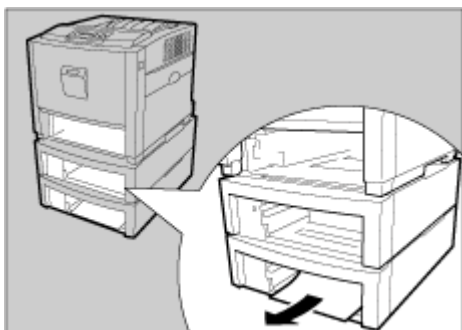
2 Remove any misfed paper.

❖ Tray 1



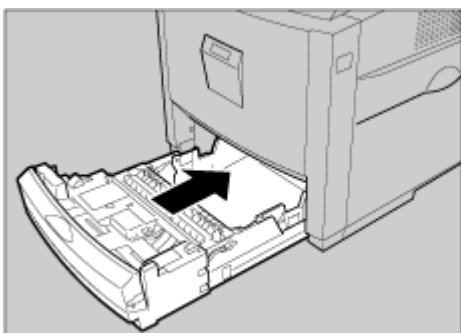
AJT0745

❖ Tray 2/3



AJT0755

- 3** Slide the paper tray fully into the printer.

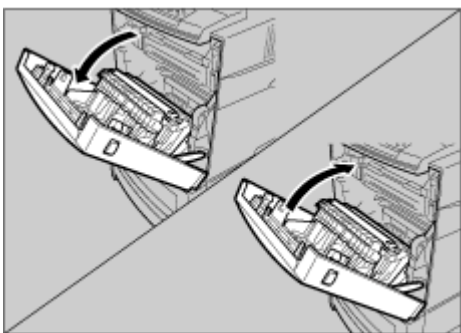


AJT0765

★ Important

- ☐ Misfeeds can occur if the paper tray is not fully inserted. Make sure it is fully inserted.

- 4** Open the front cover by pushing the front cover release button, and then close it to reset the misfeed condition.





AJT1005

↓ Note

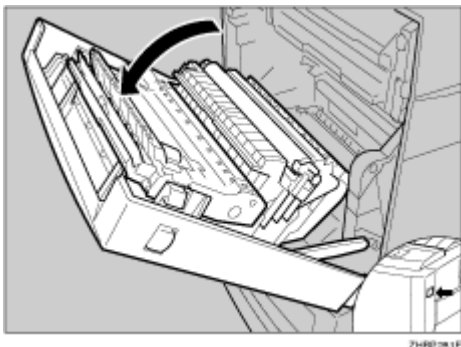
- ☐ This procedure is also applicable to both the paper tray and the optional paper feed unit.

When “Remove Misfeed Z: Duplex Unit” Appears

CAUTION

- The inside of this machine gets very hot. Do not touch parts labelled “” (hot surface). Touching “” labelled parts could result in burns.

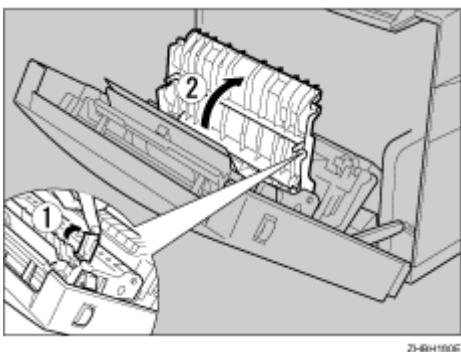
- 1** Open the front cover by pushing the front cover release button.



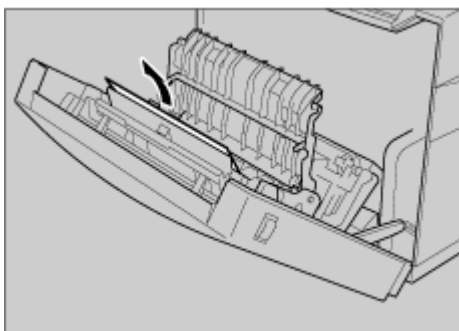
Note

- ☐ Close the bypass tray if it is extended. If the bypass tray is extended, the front cover does not open.

- 2** Pull the lever marked “PULL” on the duplex unit (①), and then pull up the duplex unit until it stops (②).

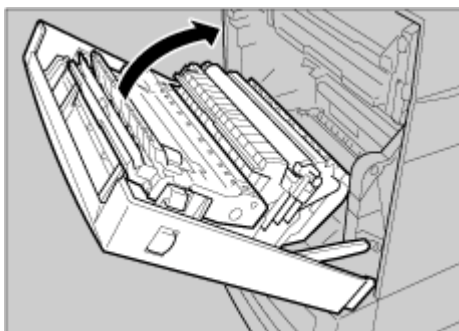


3 Remove any misfed paper.



ZH-BP190E

4 Close the front cover carefully.



ZH-BP202E

Moving and Transporting the Printer

CAUTION

- *When moving the machine, each person should hold the handles that are located on opposite sides, and then lift it slowly. Lifting it carelessly or dropping it may cause an injury.*
- *When you move the printer, remember to unplug the power cord from the wall outlet to avoid a fire or an electric shock.*
- *When you pull out the plug from the socket, grip the plug, not the cord, to avoid damaging the cord and causing a fire or an electric shock.*
- *When moving the printer after use, do not take out any of the Toners, Photo Conductor Units, nor the waste toner bottle to prevent toner spill inside the machine.*

Repack the printer in its original packing materials for transporting.

Note

- ☐ The printer weighs approximately 32 kg (70.5 lb.).

Important

- ☐ Be sure to disconnect all cables from the printer before transporting it.
- ☐ The printer is a precision piece of machinery. Take care to avoid damage during shipment.
- ☐ If the optional paper feed unit is installed, remove it from the printer, and then move them separately.

Moving the Printer

CAUTION

- *When lifting the machine, use the inset grips on both sides. Otherwise the printer could break or cause an injury if dropped.*
- *Before moving the machine, unplug the power cord from the wall outlet. If the cord is unplugged abruptly, it could become damaged. Damaged plugs or cords can cause an electrical or fire hazard.*

Moving the printer in a short distance

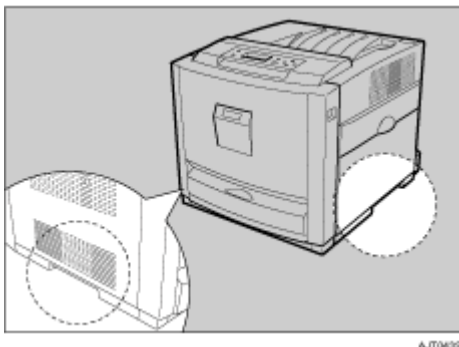
1 Be sure to check the following points:

- The power switch is turned off.
- The power cable is unplugged from the wall outlet.
- The interface cable is unplugged from the printer.

2 If the external options are installed, remove them.

See Setup Guide and follow the steps backwards for removing options.

- 3** Lift the printer with two people by using the inset grips on both side of the printer, and then move it horizontally to the place where you want to install it.



- 4** If you removed options, reinstall them.

See Setup Guide for installing options.



- ☐ Be sure to move the printer horizontally. To prevent toner from scattering, move the printer slowly.
- ☐ If the optional paper feed unit is installed, remove it from the printer, and then move them separately.

Transporting the Printer

When transporting the printer, leave consumables such as the toner cartridge, photoconductor unit, and waste toner bottle in place inside the machine.

Consumables

⚠ CAUTION

- *Our products are engineered to meet the highest standards of quality and functionality. When purchasing expendable supplies, we recommend using only those specified by an authorized dealer.*

Toner Cartridge

| Toner cartridge | Average printable number of pages per bottle ^{*1} |
|--|---|
| Color LP Toner Cassette Type165 Black | 7,000 pages |
| Color LP Toner Cassette Type165 Cyan | 6,000 pages |
| Color LP Toner Cassette Type165 Cyan SY | 2,500 pages |
| Color LP Toner Cassette Type165 Magenta | 6,000 pages |
| Color LP Toner Cassette Type165 Magenta SY | 2,500 pages |
| Color LP Toner Cassette Type165 Yellow | 6,000 pages |
| Color LP Toner Cassette Type165 Yellow SY | 2,500 pages |

*1 A4/letter 5% test chart, 3 pages/ job.

The number of printable pages varies depending on which of the two different types of toner cartridge you have installed.

↓ Note

- ☐ If toner cartridges are not changed when necessary, printing will become impossible. We recommend keeping a stock of bottles or purchasing them soon.
- ☐ The actual number of printable pages varies depending on the image volume and density, number of pages to be printed at a time, paper type and paper size used, and environmental conditions such as temperature and humidity.
- ☐ Toner cartridges may need to be changed sooner than indicated above due to deterioration over the period of use.
- ☐ Toner cartridges (consumables) are not covered by warranty. However, if there is problem, contact the store where they were purchased.
- ☐ When you first use this printer, use the four toner cartridges packaged with the printer.
- ☐ Numbers of pages that can be printed using the toner cartridge supplied with this printer are as follows:

| Toner Cartridge | Average printable number of pages per bottle |
|------------------------------|--|
| Black, Cyan, Magenta, Yellow | 2,500 pages |

Waste Toner Bottle

| Name | Average printable number of pages ^{*1} |
|-----------------------------|---|
| Waste Toner Bottle Type 165 | 14,000 pages |

*1 A4/letter 5% test chart, 3 pages/ job.



- ☐ The actual number of printable pages varies depending on the image volume and density, number of pages to be printed at a time, paper type and paper size used, and environmental conditions such as temperature and humidity.
- ☐ If the waste toner bottles are not changed when necessary, printing will become impossible. We recommend keeping a stock of bottles or purchasing them soon.

Photo Conductor Unit

| Name | Average printable number of pages ^{*1} |
|-------------------------------------|---|
| Photo Conductor Unit Type 165 Black | 15,000 pages |
| Photo Conductor Unit Type 165 Color | 15,000 pages |

*1 A4/letter 5% test chart, 3 pages/ job.



- ☐ The actual number of printable pages varies depending on the image volume and density, number of pages to be printed at a time, paper type and paper size used, and environmental conditions such as temperature and humidity.
- ☐ If the photo conductor unit is not changed when necessary, the quality of printing is not guaranteed. We recommend keeping a stock of photo conductor units or purchasing one soon.
- ☐ Photo conductor unit (consumables) are not covered by warranty. However, if there is problem, contact the store where they were purchased.

Intermediate Transfer Unit (Transfer Unit)

| Name | Average printable number of pages ^{*1} |
|-------------------------------------|---|
| Intermediate Transfer Unit Type 165 | 100,000 pages |

*1 A4/letter 5% test chart, 3 pages/ job.



- ☐ The actual number of printable pages varies depending on the image volume and density, number of pages to be printed at a time, paper type and paper size used, and environmental conditions such as temperature and humidity.

- ❑ If the transfer unit is not changed when necessary, the quality of printing is not guaranteed. We recommend keeping a stock of transfer unit or purchasing one soon.

Specifications

Mainframe



❖ Configuration:

Desktop

❖ Print Process:

Laser beam scanning & Electrophotographic printing
4 drums tandem method



❖ First Print Speed:

Monochrome: 13.5 sec or less (A4 )
Color: 14.5 sec or less (A4 )



- ☐ If the printer has not been used for a while, there may be a short delay before the first page starts printing.

❖ Printing Speed:

Monochrome: Maximum 21 pages per minute (A4 ) ^{*1}
Color: Maximum 21 pages per minute (A4 ) ^{*1}

^{*1} Printing speed may vary depending on the setting up environment.

❖ Resolution:

1200 × 1200 dpi (RPCS, PostScript 3, PCL 6)
1200 × 600 dpi (RPCS, PostScript 3, PCL 6)
600 × 600 dpi (RPCS, PostScript 3, PCL 5c/6)
300 × 300 dpi (PCL 5c ^{*1})

^{*1} monochrome only

❖ Paper size:

See [p.5 “Paper and Other Media Supported by This Printer”](#).

❖ Paper Weight:

See [p.5 “Paper and Other Media Supported by This Printer”](#).

❖ Media Type:

See [p.5 “Paper and Other Media Supported by This Printer”](#).

❖ Paper Output Capacity:

Standard 250 sheets (80 g/m², 20 lb.)

❖ Paper Input Capacity:

| | |
|---------------------|--------------------------|
| Standard Paper Tray | 530 sheets ^{*1} |
| Bypass Tray | 100 sheets ^{*1} |

| | |
|---------------------------|--|
| Optional Paper Feed Units | 530 sheets × 1, 530 sheets × 2 ^{*1} |
|---------------------------|--|

^{*1} Paper weight: 80 g/m² (20 lb.)

❖ **Power Source:**

120 V, 60 Hz, 11 A or more

❖ **Power Consumption:**

| | |
|--------------|---|
| Printing | 1200 W or less (No power is used during power off.) |
| Energy Saver | 9 W or less |

❖ **Warm-up Time:**

Less than 30 seconds (23°C, 71.6 F) ^{*1}

^{*1} When no error.

❖ **Dimensions:**

| | Width | Depth | Height |
|----------------------------------|----------------------|----------------------|----------------------|
| Printer only (tray not extended) | 419 mm (16.5 inches) | 536 mm (21.1 inches) | 398 mm (15.7 inches) |

❖ **Weight:**

Approximately 32 kg (70.5 lb.) (toner cartridges and power cord included)

❖ **Noise Emission ^{*1}:**

Sound Power Level

| | Mainframe only |
|-----------------|----------------|
| Stand-by | 49 dB (A) |
| During Printing | 63 dB (A) |

Sound Pressure level ^{*2}

| | Mainframe only |
|-----------------|----------------|
| Stand-by | 36 dB (A) |
| During Printing | 50 dB (A) |

^{*1} The preceding measurements made in accordance with ISO7779 are actual values.

^{*2} Measured at the position of a bystander.

❖ **Memory:**

Standard 128 MB, up to 512 MB (with the optional Memory Unit)

❖ **Interface:**

Standard:

- Ethernet (10/100Base-TX)

- **USB2.0**

It requires a USB computer port and cable that support USB 2.0.

Optional:

- IEEE 1394 (SCSI print, IP over 1394)
- IEEE 802.11b (Wireless LAN)
- Parallel (Bidirectional IEEE1284)
- Bluetooth

❖ **Printer Language:**

RPCS, PJP, PCL 5c/6, PostScript 3, PDF

❖ **Fonts:**

PCL 5c

Agfa Monotype 35 Intellifonts, 10 TrueTypefonts, and 1 Bitmap font.

PostScript 3

136 fonts (Type 2:24, Type 14:112)

Options

Paper Feed Unit Type 3000

❖ **Paper size:**

A4 ☐, B5 ☐, Letter ($8\frac{1}{2} \times 11$ inches) ☐, Legal ($8\frac{1}{2} \times 14$ inches) ☐

❖ **Dimensions (W × D × H):**

410 × 536 × 147 mm ($16.2 \times 21.1 \times 5.8$ inches)

❖ **Paper weight:**

60.2 - 104.7 g/m², (16 - 28 lb.)

❖ **Weight:**

Less than 7.5 kg (16.4 lb)

AD440 (Duplex Unit)

❖ **Dimensions (W × D × H):**

325 × 237 × 169 mm ($12.8 \times 9.4 \times 2.7$ inches)



☐ This option is built into the machine.

❖ **Paper size:**

A4, B5(JIS), $8\frac{1}{2} \times 14$, $8\frac{1}{2} \times 11$

❖ **Paper weight:**

60.2 - 104.7 g/m² (16 - 28 lb.)

❖ **Weight:**

Less than 0.8 kg (1.7 lb.)

Printer Hard Disk Type 3000

❖ **Storage Capacity (Formatted):**

10 GB

❖ **Specifications:**

- Spool print data to collate
- Spool Sample Print/Locked Print data
- Store PostScript fonts
- Store log data



- ☐ You can install PostScript fonts with this optional hard disk drive. With Mac OS, types of fonts supported are PostScript Type 1 and PostScript Type 2. To download them, use Printer Utility for Mac.

User Account Enhance Unit Type E

❖ **Capacity:**

128 KB

- Store User Code (up to 500 users)

Memory Unit Type D 128MB/Memory Unit Type E 256MB

❖ **Module Type:**

SO-DIMM (Small Outline Dual-in-line Memory Module)

❖ **Memory Type:**

SDRAM (Synchronous Dynamic RAM)

❖ **Number of Pins:**

200 pins

IEEE 1394 Interface Board Type B

❖ **Interface:**

IEEE Std. 1394-1955 compliant, IEEE Std. 1394-2000 compliant.

❖ **Interface Connector:**

IEEE 1394 (6 pins × 2)

❖ **Required cable:**

IEEE 1394 interface cable (6 pins x 4 pins, 6 pins x 6 pins)

 **Important**

- ☐ You cannot plug devices together to create loops.
- ☐ Do not use a cable more than 4.5 meters long.

❖ **Connectable number of devices in a bus:**

Maximum 63

❖ **Allowed cable hops in a bus:**

Maximum 16

❖ **Data Transmission:**

400 Mbps (Maximum)

❖ **Power supply:**

Non power supply

Cable Power repeated (IEEE 1394a-2000 compliant)

IEEE 802.11b Interface Unit Type H

❖ **Transmission Spec.:**

Based on IEEE 802.11b (Wireless LAN)

❖ **Protocol:**

TCP/IP, NetBEUI, IPX/SPX, AppleTalk

 **Note**

- ☐ SmartDeviceMonitor and Web Image Monitor are supported.

❖ **Data Transfer Speed:**

Auto select from below speed

1 Mbps, 2 Mbps, 5.5 Mbps, 11 Mbps

❖ **Frequency Range:**

- Inch version:
2412-2462 MHz (1-11 channels)
- Metric version:
2412-2472 MHz (1-13 channels)

❖ **Transmittable Distance:**

1 Mbps 400 m ^{*1}

2 Mbps 270 m ^{*1}

5.5 Mbps 200 m ^{*1}

11 Mbps 140 m ^{*1}

^{*1} These figures are a guideline for outdoor use. In general, the transmittable distance indoors is 10-100 m, depending on the environment.

❖ **Transmission Mode:**

ad hoc mode and infrastructure mode

IEEE 1284 Interface Board Type A

❖ **Transmission Spec.:**

IEEE 1284

❖ **Required cable:**

Standard IEEE 1284 compliant Micro Centronics 36 pin cable

Bluetooth Interface Unit Type 3245

❖ **Supported Profiles:**

- SPP (Serial Port Profile)
- HCRP (Hardcopy Cable Replacement Profile)
- BIP (Basic Imaging Profile)

❖ **Frequency Range:**

2 GHz ISM band

❖ **Data Transmission Speed:**

732 kbps



- ☐ The transmission speed is adjusted according to factors such as the distance and obstacles between the devices, radio signal condition and Bluetooth adaptor.

❖ **Maximum Range:**

10 m